

SAR Test Report

Report No. : SF200417C02
Applicant : Hon Lin Technology Co., Ltd.
Address : 11F, No.32, Jihu Rd., Neihu Dist., Taipei City 114, Taiwan R.O.C.
Product : 5G WWAN Module
FCC ID : 2AQ68T99W175-D1
Brand : FOXCONN
Model No. : T99W175
Standards : FCC 47 CFR Part 2 (2.1093), IEEE C95.1:1992, IEEE Std 1528:2013
KDB 865664 D01 v01r04, KDB 865664 D02 v01r02
KDB 248227 D01 v02r02, KDB 447498 D01 v06 KDB 616217 D04 v01r02, KDB
941225 D01 v03r01, KDB 941225 D05 v02r05, KDB 941225 D05A v01r02
Sample Received Date : Apr. 17, 2020
Date of Testing : Apr. 24, 2020 ~ Aug. 19, 2020
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Test Location : No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City, Taiwan

CERTIFICATION: The above equipment have been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch–Lin Kou Laboratories**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's SAR characteristics under the conditions specified in this report. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product certification, approval, or endorsement by TAF or any government agencies.

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FCC Accredited No.: TW0003

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Release Control Record

Report No.	Reason for Change	Date Issued
SF200417C02	Initial release	Aug. 21, 2020

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1. Summary of Maximum SAR Value

Equipment Class	Mode	Highest SAR-1g Body-worn (W/kg)	
		Tablet	Laptop
PCB	WCDMA II	0.35	0.89
	WCDMA IV	0.65	0.96
	WCDMA V	0.98	1.02
	LTE 2	0.55	0.66
	LTE 4	0.62	0.66
	LTE 5	0.56	0.59
	LTE 7	0.62	0.61
	LTE 12	0.68	0.73
	LTE 13	0.65	0.57
	LTE 14	1.02	0.66
	LTE 17	1.10	0.57
	LTE 25	0.39	0.54
	LTE 26	0.59	0.72
	LTE 30	1.03	0.66
	LTE 38	0.58	0.79
	LTE 41	0.55	0.54
	LTE 42	0.94	0.96
	LTE 48	0.63	0.62
	LTE 66	0.75	0.70
	LTE 71	0.61	0.58
	5G NR-n2	0.77	0.73
	5G NR-n5	0.74	0.77
	5G NR-n7	0.47	0.65
	5G NR-n12	0.69	0.72
	5G NR-n41	0.77	0.74
	5G NR-n66	0.51	0.59
DTS	2.4G WLAN	1.05	0.60
NII	5.2G WLAN	1.18	N/A
	5.3G WLAN	N/A	1.05
	5.6G WLAN	1.07	0.81
	5.8G WLAN	1.19	1.01
DSS	Bluetooth	0.25	0.20

Highest Simultaneous Transmission SAR	Highest SAR-1g Body-worn (W/kg)	
	Tablet	Laptop
	1.59	1.59

Note:

- The SAR criteria (**Head & Body: SAR-1g1.6 W/kg, and Extremity: SAR-10g 4.0 W/kg**)for general population/uncontrolled exposure is specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992.

2. Description of Equipment Under Test

EUT Type	5G WWAN Module
FCC ID	2AQ68T99W175-D1
Brand Name	FOXCONN
Model Name	T99W175
EUT Configurations	Sample1 : WWAN ET Ant + WLAN ET Ant + 6Cell Battery Sample2 : WWAN WNC Ant + WLAN ET Ant + 6Cell Battery Sample3 : WWAN ET Ant + WLAN HB Ant + 4Cell Battery Sample4 : WWAN WNC Ant + WLAN HB Ant + 4Cell Battery
Tx Frequency Bands (Unit: MHz)	WCDMA Band II : 1852.4 ~ 1907.6 WCDMA Band IV : 1712.4 ~ 1752.6 WCDMA Band V : 826.4 ~ 846.6 LTE Band 2 : 1850.7 ~ 1909.3 (BW: 1.4M, 3M, 5M, 10M, 15M, 20M) LTE Band 4 : 1710.7 ~ 1754.3 (BW: 1.4M, 3M, 5M, 10M, 15M, 20M) LTE Band 5 : 824.7 ~ 848.3 (BW: 1.4M, 3M, 5M, 10M) LTE Band 7 : 2502.5 ~ 2567.5 (BW: 5M, 10M, 15M, 20M) LTE Band 12 : 699.7 ~ 715.3 (BW: 1.4M, 3M, 5M, 10M) LTE Band 13 : 779.5 ~ 784.5 (BW: 5M, 10M) LTE Band 14 : 790.5 ~ 795.5 (BW: 5M, 10M) LTE Band 17 : 706.5 ~ 713.5 (BW: 5M, 10M) LTE Band 25 : 1850.7 ~ 1914.3 (BW: 1.4M, 3M, 5M, 10M, 15M, 20M) LTE Band 26 : 814.7 ~ 848.3 (BW: 1.4M, 3M, 5M, 10M, 15M) LTE Band 29 : 717 ~ 728(Rx only) LTE Band 30 : 2307.5 ~ 2312.5 (BW: 5M, 10M) LTE Band 38 : 2572.5 ~ 2617.5 (BW: 5M, 10M, 15M, 20M) LTE Band 41 : 2498.5 ~ 2687.5 (BW: 5M, 10M, 15M, 20M) LTE Band 42 : 3550~3600 (BW: 5M, 10M, 15M, 20M) LTE Band 48 : 3550 ~ 3700 (BW: 5M, 10M, 15M, 20M) LTE Band 66 : 1710.7 ~ 1779.3 (BW: 1.4M, 3M, 5M, 10M, 15M, 20M) LTE Band 71 : 663 ~ 698 (BW: 5M, 10M, 15M, 20M) NR Band 2 : 1850.7 ~ 1909.3 (BW: 5M, 10M, 15M, 20M) NR Band 5 : 824.7 ~ 848.3 (BW: 5M, 10M, 15M, 20M) NR Band 7 : 2502.5 ~ 2567.5(BW: 5M, 10M, 15M, 20M) NR Band 12 : 699.7 ~ 715.3(BW: 5M, 10M, 15M) NR Band 41 : 2498.5 ~ 2687.5(BW: 20M, 40M, 50M, 60M, 80M, 90M, 100M) NR Band 66 : 1710.7 ~ 1779.3 (BW: 5M, 10M, 15M, 20M) WLAN : 2412 ~ 2472, 5180 ~ 5240, 5260 ~ 5320, 5500 ~ 5720, 5745 ~ 5825 Bluetooth : 2402 ~ 2480
Uplink Modulations	WCDMA : QPSK LTE/NR : QPSK, 16QAM, 64QAM, 256QAM 802.11b : DSSS 802.11a/g/n/ac : OFDM 802.11ax : OFDMA Bluetooth : GFSK, $\pi/4$ -DQPSK, 8DPSK
5G NR FR1 SCS	15 kHz for FDD/ 30 kHz for TDD
EN-DC Uplink Combinations	5A-n2A, 12A-n2A, 13A-n2A, 48A-n2A, 2A-n5A, 7A-n5A, 48A-n5A, 66A-n5A, 5A-n7A, 12A-n7A, 2A-n12A, 66A-n12A, 2A-n41A, 25A-n41A, 26A-n41A, 66A-n41A, 5A-n66A, 12A-n66A, 13A-n66A, 48A-n66A, 71A-n66A
Maximum Tune-up Conducted Power (Unit: dBm)	Please refer to section 4.6.1 of this report
Antenna Type	Refer to Note as below
EUT Stage	Mass product

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Note:

- The EUT is authorized for use in specific End-product. Please refer to below for more details.

Product	Brand	Model
Portable Computer	DELL	P95F

- The antenna information is listed as below.

WWAN Antenna Gain (dBi)												
Antenna Type	PIFA											
Band	WCDMA			LTE								
	2	4	5	2	4	5	7	12	13	14	17	25
ET NB	2.79	1.7	-1.61	2.79	1.7	-1.61	0.98	-1.66	-0.11	-0.44	-1.66	2.82
ET TB	-2.22	-3.07	-9.34	-2.22	-3.07	-9.34	-0.34	-6.35	-8.87	-8.66	-6.36	-1.69
WNC NB	2.69	1.69	-1.62	2.69	1.69	-1.62	0.97	-1.72	-0.23	-0.50	-1.72	2.7
WNC TB	-2.31	-3.11	-9.46	-2.31	-3.11	-9.46	-0.43	-6.37	-8.99	-8.73	-6.37	-1.71

Parts Number:

Ethertronics: 5003806 (Main MIMO, Tx1/ Rx1)

WNC: 81ELAS.G63 (Main MIMO, Tx1/ Rx1)

WWAN Antenna Gain (dBi)									
Antenna Type	PIFA								
Band	LTE								
	26	30	38	41	42	48	66	71	
ET NB	-1.73	2.92	0.86	0.98	-0.01	-0.04	1.98	-2.66	
ET TB	-9.34	-2.31	-0.34	-0.17	0.79	-1.16	-2.99	-7.13	
WNC NB	-1.8	2.89	0.8	0.97	-0.09	0.04	1.89	-2.7	
WNC TB	-9.46	-2.37	-0.46	-0.26	0.78	-1.12	-3.05	-7.15	

Parts Number:

Ethertronics: 5003806 (Main MIMO, Tx1/ Rx1)

WNC: 81ELAS.G63 (Main MIMO, Tx1/ Rx1)

WWAN Antenna Gain (dBi)						
Antenna Type	PIFA					
Band	NR					
	2	5	7	12	41	66
ET NB	2.79	-1.61	0.98	-1.66	0.98	1.98
ET TB	-2.22	-9.34	-0.34	-6.35	-0.17	-2.99
WNC NB	2.69	-1.62	0.97	-1.72	0.97	1.89
WNC TB	-2.31	-9.46	-0.43	-6.37	-0.26	-3.05

Parts Number:

Ethertronics: 5003806 (Main MIMO, Tx1/ Rx1)

WNC: 81ELAS.G63 (Main MIMO, Tx1/ Rx1)

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WLAN Antenna							
Ant. Type	Manufacturer	Parts Number		Antenna Gain (dBi)			
				BT/WLAN 2.4 GHz	WLAN 5.15~5.35 GHz	WLAN 5.47~5.725 GHz	WLAN 5.725~5.85 GHz
PIFA	Hong-BO Co., Ltd.	Main	260-24302 (DC33002CQ1L)	-1.28	-2.02	-1.23	-0.14
		Aux.	260-24302 (DC33002CQ1L)	-2.76	-1.06	-1.24	-1.06
PIFA	Ethertronics	Main	5003710 (DC33002CL3L)	-1.51	-0.68	-0.73	-0.58
		Aux.	5003710 (DC33002CL3L)	-2.34	-1.16	-1.35	-1.35

3. The above EUT information is declared by manufacturer and for more detailed features description please refers to the manufacturer's specifications or User's Manual.

List of Accessory:

WWAN Module	Brand Name	FOXCONN
	Model Name	T99W175
	FCC ID	2AQ68T99W175-D1
WLAN Module	Brand Name	Intel® Wi-Fi 6 AX201
	Model Name	AX201D2W
	FCC ID	PD9AX201D2
Battery 1 (6 Cell)	Brand Name	Dell
	Model Name	TVKGH
	Power Rating	7334mAh, 88Wh, 11.4V
	Type	Li-ion
Battery 2 (4 Cell)	Brand Name	Dell
	Model Name	N7HT0
	Power Rating	6500mAh, 52Wh, 7.6V
	Type	Li-ion

3. SAR Measurement System

3.1 Definition of Specific Absorption Rate (SAR)

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

$$SAR = \frac{d}{dt} \left(\frac{dW}{dm} \right) = \frac{d}{dt} \left(\frac{dW}{\rho dv} \right)$$

SAR is expressed in units of Watts per kilogram (W/kg)

SAR measurement can be related to the electrical field in the tissue by

$$SAR = \frac{\sigma |E|^2}{\rho}$$

Where: σ is the conductivity of the tissue, ρ is the mass density of the tissue and E is the RMS electrical field strength.

3.2 SPEAG DASY6 System

DASY6 system consists of high precision robot, probe alignment sensor, phantom, robot controller, controlled measurement server and near-field probe. The robot includes six axes that can move to the precision position of the DASY6 software defined. The DASY6 software can define the area that is detected by the probe. The robot is connected to controlled box. Controlled measurement server is connected to the controlled robot box. The DAE includes amplifier, signal multiplexing, AD converter, offset measurement and surface detection. It is connected to the Electro-optical coupler (ECO). The ECO performs the conversion from the optical into digital electric signal of the DAE and transfers data to the PC.

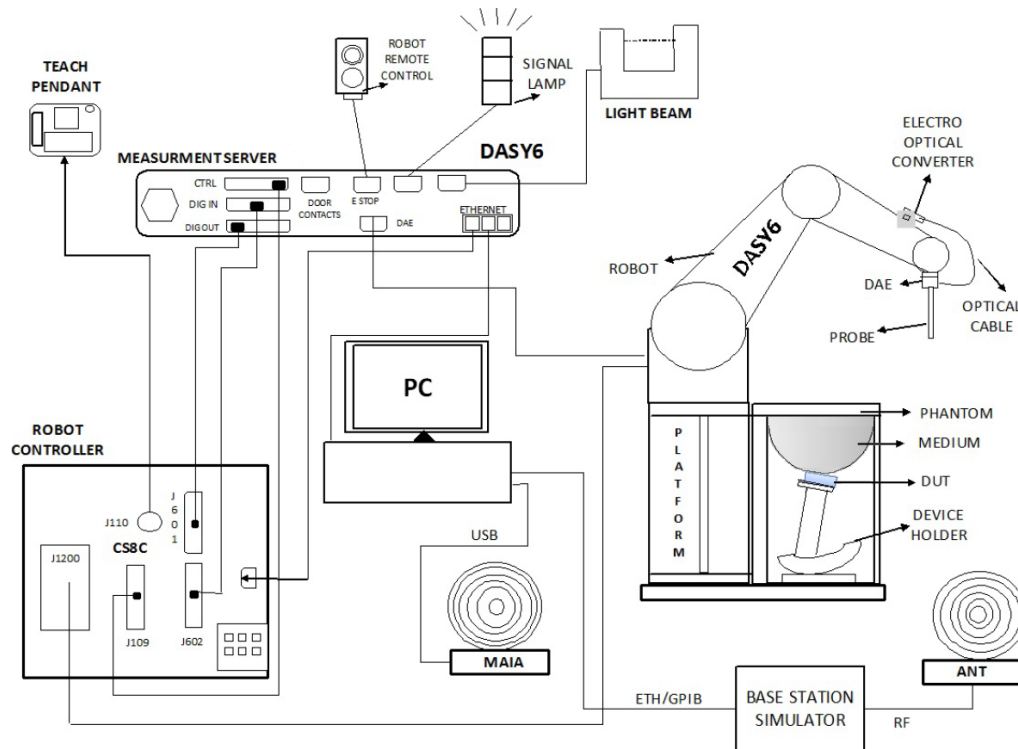


Fig-3.1 SPEAG DASY6 System Setup

3.2.1 Robot

The DASY6 system uses the high precision robots from Stäubli SA (France). For the 6-axis controller system, the robot controller version of CS8c from Stäubli is used. The Stäubli robot series have many features that are important for our application:

- High precision (repeatability ± 0.035 mm)
- High reliability (industrial design)
- Jerk-free straight movements
- Low ELF interference (the closed metallic construction shields against motor control fields)



Fig-3.2 SPEAG DASY6 System

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3.2.2 Probes

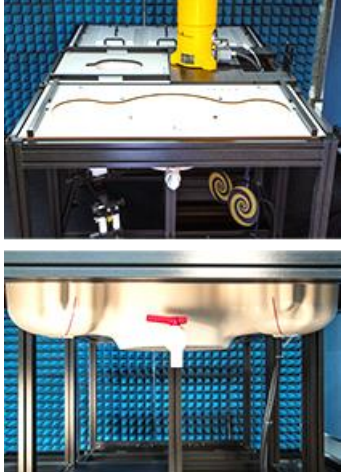
The SAR measurement is conducted with the dosimetric probe. The probe is specially designed and calibrated for use in liquid with high permittivity. The dosimetric probe has special calibration in liquid at different frequency.

Model	EX3DV4	
Construction	Symmetrical design with triangular core. Built-in shielding against static charges. PEEK enclosure material (resistant to organic solvents, e.g., DGBE).	
Frequency	4 MHz to 10 GHz Linearity: ± 0.2 dB	
Directivity	± 0.1 dB in TSL (rotation around probe axis) ± 0.3 dB in TSL (rotation normal to probe axis)	
Dynamic Range	10 μ W/g to 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 μ W/g)	
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	

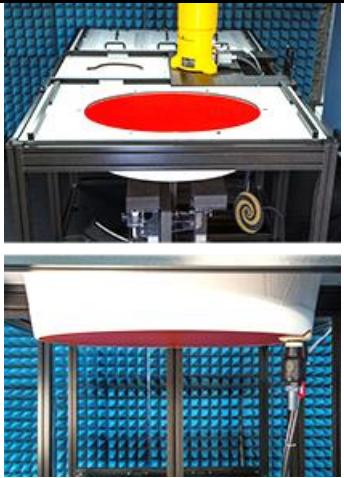
3.2.3 Data Acquisition Electronics (DAE)

Model	DAE3, DAE4	
Construction	Signal amplifier, multiplexer, A/D converter and control logic. Serial optical link for communication with DASY embedded system (fully remote controlled). Two step probe touch detector for mechanical surface detection and emergency robot stop.	
Measurement Range	-100 to +300 mV (16 bit resolution and two range settings: 4mV, 400mV)	
Input Offset Voltage	$< 5\mu$ V (with auto zero)	
Input Bias Current	< 50 fA	
Dimensions	60 x 60 x 68 mm	

3.2.4 Phantoms

Model	SAM-Twin Phantom	
Construction	The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE Std 1528 and IEC 62209-1. It enables the dosimetric evaluation of left and right hand phone usage as well as body-mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by teaching three points with the robot.	
Material	Vinylester, fiberglass reinforced (VE-GF)	
Shell Thickness	2 ± 0.2 mm (6 ± 0.2 mm at ear point)	
Dimensions	Length: 1000 mm Width: 500 mm Height: adjustable feet	
Filling Volume	approx. 25 liters	

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Model	ELI	
Construction	The ELI phantom is used for compliance testing of handheld and body-mounted wireless devices. ELI is fully compatible with the IEC 62209-2 standard and all known tissue simulating liquids. ELI has been optimized regarding its performance and can be integrated into our standard phantom tables. A cover prevents evaporation of the liquid. Reference markings on the phantom allow installation of the complete setup, including all predefined phantom positions and measurement grids, by teaching three points. The phantom is compatible with all SPEAG dosimetric probes and dipoles.	
Material	Vinylester, fiberglass reinforced (VE-GF)	
Shell Thickness	2.0 ± 0.2 mm (bottom plate)	
Dimensions	Major axis: 600 mm Minor axis: 400 mm	
Filling Volume	approx. 30 liters	

3.2.5 Device Holder

Model	MD4HHTV5 - Mounting Device for Hand-Held Transmitters	
Construction	In combination with the Twin SAM or ELI phantoms, the Mounting Device for Hand-Held Transmitters enables rotation of the mounted transmitter device to specified spherical coordinates. At the heads, the rotation axis is at the ear opening. Transmitter devices can be easily and accurately positioned according to IEC 62209-1, IEEE 1528, FCC, or other specifications. The device holder can be locked for positioning at different phantom sections (left head, right head, flat).	
Material	Polyoxymethylene (POM)	

Model	MDA4WTV5 - Mounting Device Adaptor for Ultra Wide Transmitters	
Construction	An upgrade kit to Mounting Device to enable easy mounting of wider devices like big smart-phones, e-books, small tablets, etc. It holds devices with width up to 140 mm.	
Material	Polyoxymethylene (POM)	

Model	MDA4SPV6 - Mounting Device Adaptor for Smart Phones	
Construction	The solid low-density MDA4SPV6 adaptor assuring no impact on the DUT radiation performance and is conform with any DUT design and shape.	
Material	ROHACELL	

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Model	MD4LAPV5 - Mounting Device for Laptops and other Body-Worn Transmitters	
Construction	In combination with the Twin SAM or ELI phantoms, the Mounting Device (Body-Worn) enables testing of transmitter devices according to IEC 62209-2 specifications. The device holder can be locked for positioning at a flat phantom section.	
Material	Polyoxymethylene (POM), PET-G, Foam	

3.2.6 System Validation Dipoles

Model	D-Serial	
Construction	Symmetrical dipole with 1/4 balun. Enables measurement of feed point impedance with NWA. Matched for use near flat phantoms filled with tissue simulating solutions.	
Frequency	750 MHz to 5800 MHz	
Return Loss	> 20 dB	
Power Capability	> 100 W (f < 1GHz), > 40 W (f > 1GHz)	

3.2.7 Power Source

Model	Powersource1	
Signal Type	Continuous Wave	
Operating Frequencies	600 MHz to 5850 MHz	
Output Power	-5.0 dBm to +17.0 dBm	
Power Supply	5V DC, via USB jack	
Power Consumption	<3 W	
Applications	System performance check and validation with a CW signal.	

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3.2.8 Tissue Simulating Liquids

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. The nominal dielectric values of the tissue simulating liquids in the phantom and the tolerance of 10 % are listed in Table-3.1.

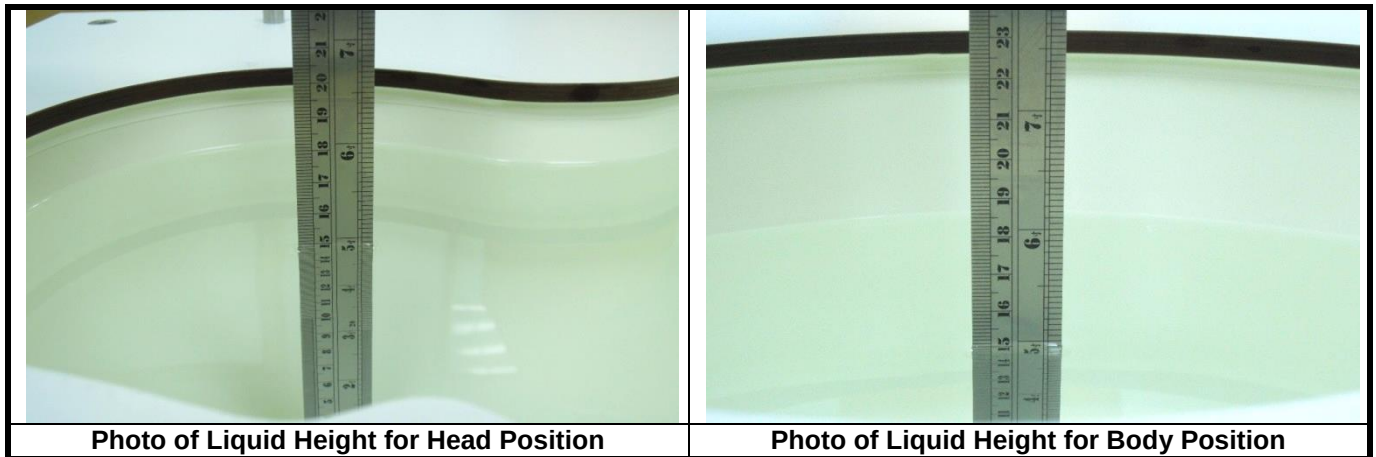


Table-3.1 Targets of Tissue Simulating Liquid

Frequency (MHz)	Target Permittivity	Range of $\pm 10\%$	Target Conductivity	Range of $\pm 10\%$
450	43.5	39.2 ~ 47.9	0.87	0.78 ~ 0.96
750	41.9	37.7 ~ 46.1	0.89	0.80 ~ 0.98
835	41.5	37.4 ~ 45.7	0.90	0.81 ~ 0.99
900	41.5	37.4 ~ 45.7	0.97	0.87 ~ 1.07
1450	40.5	36.5 ~ 44.6	1.20	1.08 ~ 1.32
1500	40.4	36.4 ~ 44.4	1.23	1.11 ~ 1.35
1640	40.2	36.2 ~ 44.2	1.31	1.18 ~ 1.44
1750	40.1	36.1 ~ 44.1	1.37	1.23 ~ 1.51
1800	40.0	36.0 ~ 44.0	1.40	1.26 ~ 1.54
1900	40.0	36.0 ~ 44.0	1.40	1.26 ~ 1.54
2000	40.0	36.0 ~ 44.0	1.40	1.26 ~ 1.54
2100	39.8	35.8 ~ 43.8	1.49	1.34 ~ 1.64
2300	39.5	35.6 ~ 43.5	1.67	1.50 ~ 1.84
2450	39.2	35.3 ~ 43.1	1.80	1.62 ~ 1.98
2600	39.0	35.1 ~ 42.9	1.96	1.76 ~ 2.16
3000	38.5	34.7 ~ 42.4	2.40	2.16 ~ 2.64
3500	37.9	34.1 ~ 41.7	2.91	2.62 ~ 3.20
4000	37.4	33.7 ~ 41.1	3.43	3.09 ~ 3.77
4500	36.8	33.1 ~ 40.5	3.94	3.55 ~ 4.33
5000	36.2	32.6 ~ 39.8	4.45	4.01 ~ 4.90
5200	36.0	32.4 ~ 39.6	4.66	4.19 ~ 5.13
5400	35.8	32.2 ~ 39.4	4.86	4.37 ~ 5.35
5600	35.5	32.0 ~ 39.1	5.07	4.56 ~ 5.58
5800	35.3	31.8 ~ 38.8	5.27	4.74 ~ 5.80
6000	35.1	31.6 ~ 38.6	5.48	4.93 ~ 6.03

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The dielectric properties of the tissue simulating liquids are defined in IEC 62209-1 and IEC 62209-2. The dielectric properties of the tissue simulating liquids were verified prior to the SAR evaluation using a dielectric assessment kit and a network analyzer.

Since the range of $\pm 10\%$ of the required target values is used to measure relative permittivity and conductivity, the SAR correction procedure is applied to correct measured SAR for the deviations in permittivity and conductivity. Only positive correction has been used to scale up the measured SAR, and SAR result would not be corrected if the correction Δ SAR has a negative sign.

The following table gives the recipes for tissue simulating liquids.

Table-3.2 Recipes of Tissue Simulating Liquid

Tissue Type	Bactericide	DGBE	HEC	NaCl	Sucrose	Triton X-100	Water	Diethylene Glycol Mono-hexylether
H750	0.2	-	0.2	1.5	56.0	-	42.1	-
H835	0.2	-	0.2	1.5	57.0	-	41.1	-
H900	0.2	-	0.2	1.4	58.0	-	40.2	-
H1450	-	43.3	-	0.6	-	-	56.1	-
H1640	-	45.8	-	0.5	-	-	53.7	-
H1750	-	47.0	-	0.4	-	-	52.6	-
H1800	-	44.5	-	0.3	-	-	55.2	-
H1900	-	44.5	-	0.2	-	-	55.3	-
H2000	-	44.5	-	0.1	-	-	55.4	-
H2300	-	44.9	-	0.1	-	-	55.0	-
H2450	-	45.0	-	0.1	-	-	54.9	-
H2600	-	45.1	-	0.1	-	-	54.8	-
H3500	-	8.0	-	0.2	-	20.0	71.8	-
H5G	-	-	-	-	-	17.2	65.5	17.3

3.3 SAR System Verification

The system check verifies that the system operates within its specifications. It is performed daily or before every SAR measurement. The system check uses normal SAR measurements in the flat section of the phantom with a matched dipole at a specified distance. The system verification setup is shown as below.

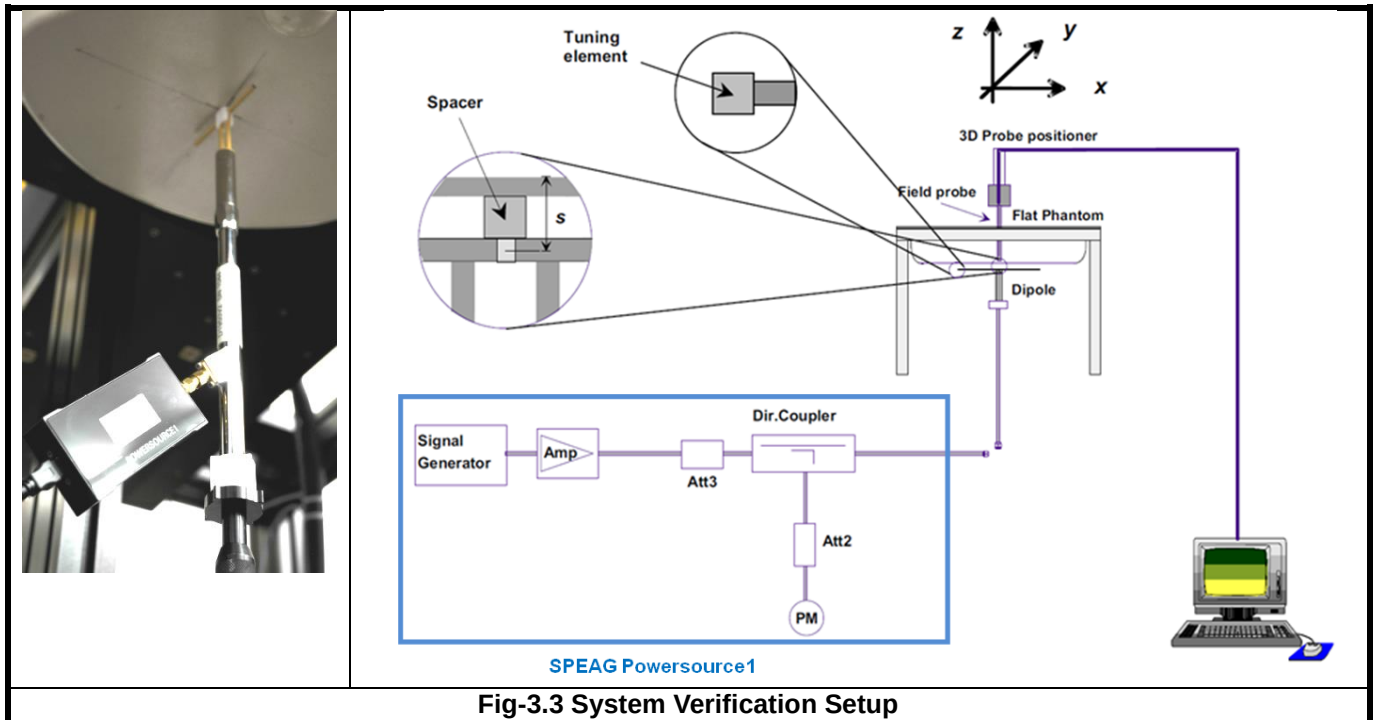


Fig-3.3 System Verification Setup

The SPEAG Powersource1 is a portable and very stable RF source providing a continuous wave (CW) signal. It is designed for conducting SAR system checks and SAR system validation of DASY and is compatible with IEC 62209-1, IEC 62209-2 and IEEE Std 1528 standards. The Powersource1 has been calibrated by SPEAG's ISO/IEC 17025-accredited calibration center. When using Powersource1, the setup can be simplified, as shown in Fig-3.3. The signal purity is warranted by design. Since the Powersource1 is calibrated, no additional equipment is needed and the Powersource1 can directly be connected to the SMA connector of the dipole without a cable as all separate components (signal generator, amplifier, coupler and power meter) are built into the unit.

The validation dipole is placed beneath the flat phantom with the specific spacer in place. The distance spacer is touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The Powersource1 is adjusted for the desired forward power of 17 dBm at the dipole connector and the RF output power would be turned on. After system check testing, the SAR result will be normalized to 1W forward input power and compared with the reference SAR value derived from validation dipole certificate report. The deviation of system check should be within 10 %.

3.4 SAR Measurement Procedure

According to the SAR test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

- Power reference measurement
- Area scan
- Zoom scan
- Power drift measurement

The SAR measurement procedures for each of test conditions are as follows:

- Make EUT to transmit maximum output power
- Measure conducted output power through RF cable
- Place the EUT in the specific position of phantom
- Perform SAR testing steps on the DASY system
- Record the SAR value

3.4.1 Area Scan and Zoom Scan Procedure

First area scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an area scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, zoom scan is required. The zoom scan is performed around the highest E-field value to determine the averaged SAR-distribution.

Measure the local SAR at a test point at 1.4 mm of the inner surface of the phantom recommended by SEPAG. The area scan (two-dimensional SAR distribution) is performed cover at least an area larger than the projection of the EUT or antenna. The measurement resolution and spatial resolution for interpolation shall be chosen to allow identification of the local peak locations to within one-half of the linear dimension of the corresponding side of the zoom scan volume. Following table provides the measurement parameters required for the area scan.

Parameter	$f \leq 3 \text{ GHz}$	$3 \text{ GHz} < f \leq 6 \text{ GHz}$
Maximum distance from closest measurement point to phantom surface	5 ± 1	$\delta \ln(2)/2 \pm 0.5$
Maximum probe angle from probe axis to phantom surface normal at the measurement location	$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
Maximum area scan spatial resolution: $\Delta x_{\text{Area}}, \Delta y_{\text{Area}}$	$\leq 2 \text{ GHz: } \leq 15 \text{ mm}$ $2 - 3 \text{ GHz: } \leq 12 \text{ mm}$	$3 - 4 \text{ GHz: } \leq 12 \text{ mm}$ $4 - 6 \text{ GHz: } \leq 10 \text{ mm}$

From the scanned SAR distribution, identify the position of the maximum SAR value, in addition identify the positions of any local maxima with SAR values within 2 dB of the maximum value that will not be within the zoom scan of other peaks. Additional peaks shall be measured only when the primary peak is within 2 dB of the SAR compliance limit (e.g. 1 W/kg for 1.6 W/kg, 1 g limit; or 1.26 W/kg for 2 W/kg, 10 g limit).

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The zoom scan (three-dimensional SAR distribution) is performed at the local maxima locations identified in previous area scan procedure. The zoom scan volume must be larger than the required minimum dimensions. When graded grids are used, which only applies in the direction normal to the phantom surface, the initial grid separation closest to the phantom surface and subsequent graded grid increment ratios must satisfy the required protocols. The 1-g SAR averaging volume must be fully contained within the zoom scan measurement volume boundaries; otherwise, the measurement must be repeated by shifting or expanding the zoom scan volume. The similar requirements also apply to 10-g SAR measurements. Following table provides the measurement parameters required for the zoom scan.

Parameter		$f \leq 3 \text{ GHz}$	$3 \text{ GHz} < f \leq 6 \text{ GHz}$
Maximum zoom scan spatial resolution: $\Delta x_{\text{zoom}}, \Delta y_{\text{zoom}}$		$\leq 2 \text{ GHz: } \leq 8 \text{ mm}$ $2 - 3 \text{ GHz: } \leq 5 \text{ mm}$	$3 - 4 \text{ GHz: } \leq 5 \text{ mm}$ $4 - 6 \text{ GHz: } \leq 4 \text{ mm}$
Maximum zoom scan spatial resolution, normal to phantom surface	<i>uniform grid:</i> $\Delta z_{\text{zoom}}(n)$	$\leq 5 \text{ mm}$	$3 - 4 \text{ GHz: } \leq 4 \text{ mm}$ $4 - 5 \text{ GHz: } \leq 3 \text{ mm}$ $5 - 6 \text{ GHz: } \leq 2 \text{ mm}$
	<i>graded grids:</i> $\Delta z_{\text{zoom}}(1)$	$\leq 4 \text{ mm}$	$3 - 4 \text{ GHz: } \leq 3.0 \text{ mm}$ $4 - 5 \text{ GHz: } \leq 2.5 \text{ mm}$ $5 - 6 \text{ GHz: } \leq 2.0 \text{ mm}$
	$\Delta z_{\text{zoom}}(n>1)$	$\leq 1.5 \cdot \Delta z_{\text{zoom}}(n-1) \text{ mm}$	
Minimum zoom scan volume (x, y, z)		$\geq 30 \text{ mm}$	$3 - 4 \text{ GHz: } \geq 28 \text{ mm}$ $4 - 5 \text{ GHz: } \geq 25 \text{ mm}$ $5 - 6 \text{ GHz: } \geq 22 \text{ mm}$

Per IEC 62209-2 AMD1, the successively higher resolution zoom scan is required if the zoom scan measured as defined above complies with both of the following criteria, or if the peak spatial-average SAR is below 0.1 W/kg, no additional measurements are needed:

- (1) The smallest horizontal distance from the local SAR peaks to all points 3 dB below the SAR peak shall be larger than the horizontal grid steps in both x and y directions ($\Delta x, \Delta y$). This shall be checked for the measured zoom scan plane conformal to the phantom at the distance z_{M1} .
- (2) The ratio of the SAR at the second measured point (M2) to the SAR at the closest measured point (M1) at the x-y location of the measured maximum SAR value shall be at least 30 %.

If one or both of the above criteria are not met, the zoom scan measurement shall be repeated using a finer resolution. New horizontal and vertical grid steps shall be determined from the measured SAR distribution so that the above criteria are met. Compliance with the above two criteria shall be demonstrated for the new measured zoom scan.

3.4.2 Volume Scan Procedure

The volume scan is used for assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the EUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing. When all volume scan were completed, the software, SEMCAD postprocessor can combine and subsequently superpose these measurement data to calculating the multiband SAR.

3.4.3 Power Drift Monitoring

All SAR testing is under the EUT install full charged battery and transmit maximum output power. In DASY measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of EUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in dB. If the power drift more than 5%, the SAR will be retested.

3.4.4 Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the test standard. It can be conducted for 1g and 10g, as well as for user-specific masses. The DASY software includes all numerical procedures necessary to evaluate the spatial peak SAR value.

The base for the evaluation is a "cube" measurement. The measured volume must include the 1g and 10g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan.

The entire evaluation of the spatial peak values is performed within the post-processing engine (SEMCAD). The system always gives the maximum values for the 1g and 10g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages:

- (a) Extraction of the measured data (grid and values) from the Zoom Scan
- (b) Calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)
- (c) Generation of a high-resolution mesh within the measured volume
- (d) Interpolation of all measured values from the measurement grid to the high-resolution grid
- (e) Extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface
- (f) Calculation of the averaged SAR within masses of 1g and 10g

3.4.5 SAR Averaged Methods

In DASY, the interpolation and extrapolation are both based on the modified Quadratic Shepard's method. The interpolation scheme combines a least-square fitted function method and a weighted average method which are the two basic types of computational interpolation and approximation.

Extrapolation routines are used to obtain SAR values between the lowest measurement points and the inner phantom surface. The extrapolation distance is determined by the surface detection distance and the probe sensor offset. The uncertainty increases with the extrapolation distance. To keep the uncertainty within 1% for the 1 g and 10 g cubes, the extrapolation distance should not be larger than 5 mm.

4. SAR Measurement Evaluation

4.1 EUT Configuration and Setting

<Considerations Related to Proximity Sensor>

The device supports WWAN, WLAN, and Bluetooth capabilities. It is designed with a proximity sensor which can trigger/not trigger power reduction for WCDMA and LTE on Rear Face and Bottom Side of EUT for SAR compliance (Tablet mode), Bottom of EUT for SAR compliance (Laptop mode). The power reduction please refer to section 4.6 of this report.

Proximity Sensor Triggering Distances (KDB 616217 D04 §6.2)

The proximity sensor triggering distance was determined per KDB 616217 for rear face and applicable edge. Summary for power verification per distance was tabulated in the below table.

Tablet Mode

Output Power Verification in dBm for EUT Rear Face											
Distance (mm)	27	28	29	30	31	32	33	34	35	36	37
WCDMA II	12.8	12.7	12.8	12.8	12.4	12.5	24.0	24.5	24.2	24.3	24.2
WCDMA IV	15.7	15.7	15.9	16.0	15.7	15.7	24.5	24.3	24.5	24.3	24.1
WCDMA V	20.0	20.2	20.1	20.3	20.2	20.2	24.2	24.4	23.9	24.2	24.4
LTE 2	12.5	12.6	12.9	12.4	12.9	12.5	24.0	23.8	23.8	23.9	23.5
LTE 4	14.3	14.1	14.0	13.9	14.3	14.0	24.3	24.0	24.0	24.1	24.2
LTE 5	16.8	16.9	16.6	16.8	16.6	16.6	23.8	23.7	24.1	23.9	23.6
LTE 7	11.0	11.3	11.0	11.2	11.5	11.1	23.9	23.8	23.5	23.9	23.8
LTE 12	16.7	16.8	16.7	16.5	17.0	17.0	23.5	23.8	23.8	23.9	23.7
LTE 13	17.7	17.5	17.8	17.5	17.7	17.4	23.8	24.0	23.6	23.6	24.0
LTE 14	20.5	20.5	20.5	20.4	20.0	20.2	23.8	23.9	24.1	23.8	23.6
LTE 17	20.0	20.2	20.0	20.2	20.1	20.0	24.1	24.1	24.3	24.1	23.9
LTE 25	12.8	12.9	12.5	12.8	12.6	12.7	24.0	23.8	24.0	24.2	24.2
LTE 26	17.0	17.4	17.3	17.1	17.3	17.2	24.3	23.8	24.2	24.3	23.9
LTE 30	13.9	13.8	13.8	13.4	13.9	13.6	22.7	22.6	22.4	22.5	22.5
LTE 38	13.9	13.6	14.0	13.9	13.6	13.6	23.7	23.8	23.9	23.8	23.7
LTE 41	13.5	14.0	13.9	13.6	13.8	13.7	24.3	24.3	24.1	24.0	24.5
LTE 42	15.0	14.7	14.7	14.6	14.9	14.8	23.8	23.6	23.7	24.0	23.6
LTE 48	13.0	13.2	13.3	13.1	12.9	13.1	21.8	21.9	22.0	22.0	21.6
LTE 66	14.1	14.3	14.1	14.4	14.0	14.3	24.0	24.2	24.5	24.3	24.4
LTE 71	19.7	19.5	19.5	19.6	19.6	19.9	24.5	24.5	24.0	24.4	24.1
5G NR-n2	14.3	14.5	14.4	14.4	14.4	14.2	23.6	23.6	23.6	23.4	23.3
5G NR-n5	17.1	16.8	16.9	17.2	16.8	17.0	23.7	23.7	23.4	23.5	23.8
5G NR-n7	9.7	9.6	9.8	9.8	9.5	9.4	23.5	23.9	23.6	23.4	23.4
5G NR-n12	18.3	18.0	18.3	17.8	17.8	17.8	23.7	23.6	23.4	23.7	23.2
5G NR-n41	9.3	9.3	9.1	9.2	9.2	9.4	23.5	23.6	23.6	23.6	23.4
5G NR-n66	12.3	12.3	12.0	12.0	12.1	12.2	23.6	23.8	23.7	23.5	23.4

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Output Power Verification in dBm for EUT Bottom Side											
Distance (mm)	33	34	35	36	37	38	39	40	41	42	43
WCDMA II	12.8	12.9	12.7	12.9	12.5	12.6	24.0	24.0	24.5	24.3	24.4
WCDMA IV	15.6	16.0	15.8	15.6	15.9	15.6	24.1	24.2	24.3	24.4	24.4
WCDMA V	20.1	20.3	20.4	20.3	20.3	20.4	24.2	24.4	24.4	24.0	24.4
LTE 2	12.5	12.5	12.4	12.5	12.9	12.7	23.8	23.5	23.7	24.0	23.8
LTE 4	14.1	14.3	14.2	14.3	14.4	14.1	23.9	24.2	24.1	24.3	24.0
LTE 5	16.7	16.6	16.9	16.5	17.0	16.6	24.0	24.0	23.8	24.1	23.8
LTE 7	11.2	11.1	11.2	11.2	11.3	11.3	23.7	23.8	23.8	23.9	23.9
LTE 12	17.0	16.9	16.8	16.5	16.5	16.9	23.9	23.9	23.9	23.7	24.0
LTE 13	17.4	17.7	17.8	17.4	17.9	17.7	23.6	23.6	23.9	23.7	23.6
LTE 14	20.0	20.4	20.4	20.0	20.3	20.3	23.7	23.9	23.7	23.8	24.1
LTE 17	19.9	20.1	19.9	19.9	20.2	20.0	23.9	23.9	24.3	24.0	24.0
LTE 25	12.8	12.9	12.9	13.0	12.7	12.8	24.0	24.0	24.2	24.0	23.9
LTE 26	17.1	17.0	17.1	17.1	17.0	17.0	23.8	24.0	24.1	23.8	24.1
LTE 30	13.9	13.7	13.7	13.5	13.4	13.8	22.4	22.8	22.5	22.8	22.4
LTE 38	13.7	13.7	14.0	13.6	13.9	14.0	23.7	23.7	24.0	23.9	23.6
LTE 41	13.5	13.8	14.0	13.9	13.5	13.8	24.1	24.1	24.2	24.2	24.3
LTE 42	14.8	15.0	14.8	14.5	14.5	14.7	23.5	23.6	24.0	23.8	23.9
LTE 48	12.9	13.1	13.4	13.4	13.0	13.3	22.0	22.0	21.9	21.9	21.8
LTE 66	14.2	14.0	14.1	14.0	14.4	14.0	24.5	24.5	24.4	24.5	24.3
LTE 71	19.4	19.6	19.9	19.9	19.4	19.6	24.2	24.3	24.3	24.4	24.4
5G NR-n2	14.0	14.2	14.3	14.2	14.3	14.2	23.7	23.7	23.3	23.5	23.3
5G NR-n5	17.0	17.3	17.2	17.1	17.2	17.1	23.8	23.4	23.7	23.5	23.8
5G NR-n7	9.7	9.9	9.8	9.6	9.4	9.9	23.5	23.4	23.7	23.9	23.5
5G NR-n12	18.3	18.1	18.2	18.0	18.3	18.1	23.3	23.7	23.7	23.4	23.2
5G NR-n41	9.1	8.9	8.9	9.2	8.9	9.2	23.6	23.8	23.7	23.4	23.7
5G NR-n66	12.0	11.8	11.8	12.1	11.8	12.0	23.3	23.8	23.5	23.8	23.6

SAR Test Report

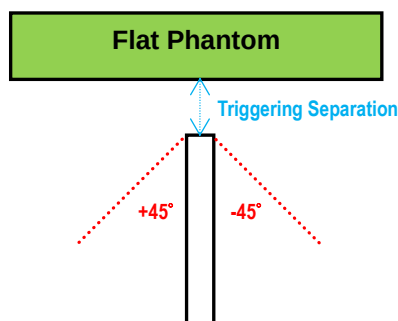
Laptop Mode

Output Power Verification in dBm for EUT Bottom											
Distance (mm)	8	9	10	11	12	13	14	15	16	17	18
WCDMA II	18.3	17.9	18.2	17.8	18.2	18.1	24.4	24.5	24.4	24.0	24.0
WCDMA IV	19.1	18.7	18.8	18.8	18.9	19.0	24.2	24.0	24.5	24.0	24.4
WCDMA V	21.7	21.5	21.9	21.4	21.8	21.5	23.9	24.4	24.4	24.4	24.2
LTE 2	16.5	16.9	16.7	16.8	16.6	16.9	23.6	23.8	23.9	23.5	23.9
LTE 4	17.8	17.8	17.9	17.8	17.9	17.5	24.0	24.3	24.4	24.3	24.4
LTE 5	19.3	19.5	19.3	19.1	19.5	19.5	23.8	23.7	23.8	24.0	24.0
LTE 7	17.7	17.7	17.7	18.0	17.6	17.9	23.5	23.5	23.6	23.9	23.8
LTE 12	19.9	19.8	19.7	19.6	19.6	19.8	23.7	23.9	23.6	23.6	24.0
LTE 13	20.0	20.0	19.9	19.9	19.6	19.8	23.8	23.7	23.7	23.6	23.9
LTE 14	22.0	21.8	22.0	21.6	21.9	21.8	24.1	23.8	23.8	23.9	23.7
LTE 17	21.5	21.1	21.0	21.0	21.0	21.1	24.4	24.3	24.1	24.4	24.0
LTE 25	17.0	16.8	16.7	16.5	16.5	16.5	23.7	24.1	23.8	23.8	23.8
LTE 26	20.1	20.2	19.8	20.2	20.1	20.3	23.8	23.8	24.3	23.9	24.3
LTE 30	18.1	18.1	18.5	18.5	18.5	18.0	22.4	22.4	22.5	22.9	22.9
LTE 38	18.8	19.0	19.0	18.7	19.0	18.5	23.7	23.8	23.8	24.0	23.6
LTE 41	19.4	19.0	19.0	19.1	19.3	19.5	24.4	24.5	24.5	24.4	24.2
LTE 42	18.4	18.3	18.5	18.1	18.0	18.5	23.7	23.5	24.0	23.8	23.7
LTE 48	17.6	17.5	17.8	17.5	17.8	17.4	21.5	21.8	21.8	21.5	21.7
LTE 66	17.5	17.7	17.6	17.9	17.5	17.8	24.3	24.3	24.2	24.5	24.4
LTE 71	20.2	20.0	20.3	20.0	20.3	20.4	24.5	24.0	24.4	24.4	24.2
5G NR-n2	15.7	15.5	15.6	15.5	15.6	15.7	23.7	23.4	23.4	23.8	23.6
5G NR-n5	18.9	19.1	18.7	18.9	19.2	18.8	23.8	23.7	23.8	23.5	23.8
5G NR-n7	14.1	14.4	14.2	14.5	14.4	14.4	23.9	23.7	23.8	23.7	23.7
5G NR-n12	19.0	19.2	18.9	18.9	19.2	19.1	23.7	23.5	23.7	23.7	23.7
5G NR-n41	13.8	13.9	13.6	13.5	13.9	13.8	23.5	23.6	23.8	23.5	23.4
5G NR-n66	15.3	15.3	15.1	15.1	15.0	15.2	23.6	23.8	23.7	23.6	23.5

SAR Test Report

Proximity Sensor Tilt Angle Influences (KDB 616217 D04 §6.4)

The proximity sensor tilt angle influence was determined per KDB 616217 for applicable edge. Summary for proximity sensor tilt angle influence is shown in below.



Orientation	Separation Distance (mm)	Tilt Angle										
		-45°	-40°	-30°	-20°	-10°	0°	10°	20°	30°	40°	45°
Bottom Edge	23	On	On	On	On	On	On	On	On	On	On	On

Summary for Proximity Sensor Triggering Test

<Tablet>

According to the procedures noticed in KDB 616217 D04, the proximity sensor triggering distance is 32 mm for EUT Rear Face, and 38 mm for Bottom Side. The separation distance of 32 mm determined by the smallest triggering distance on Bottom Side is used to access the tilt angle influence and the sensor does not release during ± 45 degree. Therefore, the smallest separation distance for tilt angle influence is 23 mm for the Bottom Side. The conservation triggering distances based on the separation distance for the sensor trigger / not triggered as EUT with power reduction at 0 mm, and EUT without power reduction at 31 mm for EUT Rear Face, and 23 mm for Bottom Side and Client decided use 25mm for Rear Face and 20mm for Bottom Side under testing.

<Laptop>

According to the procedures noticed in KDB 616217 D04, the proximity sensor triggering distance is 13 mm for EUT Bottom. The conservation triggering distances based on the separation distance for the sensor trigger / not triggered as EUT with power reduction at 0 mm and there is no full power of user mode when EUT of bottom touch user body.

The power reduction is depends on the proximity sensor input. For a steady SAR test, the power reduction was enabled or disabled manually by engineering software during SAR testing.

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<Connections between EUT and System Simulator>

For WWAN SAR testing, the EUT was linked and controlled by base station emulator. Communication between the EUT and the emulator was established by air link. The distance between the EUT and the communicating antenna of the emulator is larger than 50 cm and the output power radiated from the emulator antenna is at least 30 dB smaller than the output power of EUT. The EUT was set from the emulator to radiate maximum output power during SAR testing.

<Considerations Related to WCDMA for Setup and Testing>

WCDMA Handsets Body-worn SAR

SAR for body-worn configurations is measured using a 12.2 kbps RMC with TPC bits configured to all "1's". The 3G SAR test reduction procedure is applied to other spreading codes and multiple DPDCH_n configurations supported by the handset with 12.2 kbps RMC as the primary mode.

Handsets with Release 5 HSDPA

The 3G SAR test reduction procedure is applied to HSDPA body-worn configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSDPA using the HSDPA body SAR procedures in the "Release 5 HSDPA Data Devices", for the highest reported SAR body-worn exposure configuration in 12.2 kbps RMC. Handsets with both HSDPA and HSUPA are tested according to Release 6 HSPA test procedures.

Handsets with Release 6 HSUPA

The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body-worn configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSPA using the HSPA body SAR procedures in the "Release 6 HSPA Data Devices", for the highest reported body-worn exposure SAR configuration in 12.2 kbps RMC. When VOIP is applicable for next to the ear head exposure in HSPA, the 3G SAR test reduction procedure is applied to HSPA with 12.2 kbps RMC as the primary mode; otherwise, the same HSPA configuration used for body-worn measurements is tested for next to the ear head exposure.

SAR Test Report

Release 5 HSDPA Data Devices

The 3G SAR test reduction procedure is applied to body SAR with 12.2 kbps RMC as the primary mode. Otherwise, body SAR for HSDPA is measured using an FRC with H-Set 1 in Sub-test 1 and a 12.2 kbps RMC configured in Test Loop Mode 1, for the highest reported SAR configuration in 12.2 kbps RMC without HSDPA. HSDPA is configured according to the applicable UE category of a test device. The number of HS-DSCH / HS-PDSCHs, HARQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set. To maintain a consistent test configuration and stable transmission conditions, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4 ms and a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. DPCCH and DPDCH gain factors (β_c , β_d), and HS-DPCCH power offset parameters (Δ_{ACK} , Δ_{NACK} , Δ_{CQI}) are set according to values indicated in below. The CQI value is determined by the UE category, transport block size, number of HS-PDSCHs and modulation used in the H-set.

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	$\beta_{HS}^{(1)(2)}$	CM ⁽³⁾ (dB)	MPR ⁽³⁾ (dB)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 ⁽⁴⁾	15/15 ⁽⁴⁾	64	12/15 ⁽⁴⁾	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{HS} = 30/15 * \beta_c$.

Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and $\Delta_{NACK} = 30/15$ with $\beta_{HS} = 30/15 * \beta_c$, and $\Delta_{CQI} = 24/15$ with $\beta_{HS} = 24/15 * \beta_c$.

Note 3: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{HS}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 4: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 11/15$ and $\beta_d = 15/15$.

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DC-HSDPA SAR Guidance

The 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Otherwise, when SAR is required for Rel. 5 HSDPA, SAR is required for Rel. 8 DC-HSDPA. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.

<Considerations Related to LTE for Setup and Testing>

This device contains LTE transmitter which follows 3GPP standards, is category 3, supports both QPSK and 16QAM modulations, and supported LTE band and channel bandwidth is listed in below. The output power was tested per 3GPP TS 36.521-1 maximum transmit procedures for both QPSK and 16QAM modulation. The results please refer to section 4.6 of this report.

EUT Supported LTE Band and Channel Bandwidth						
LTE Band	BW 1.4 MHz	BW 3 MHz	BW 5 MHz	BW 10 MHz	BW 15 MHz	BW 20 MHz
2	V	V	V	V	V	V
4	V	V	V	V	V	V
5	V	V	V	V		
7			V	V	V	V
12	V	V	V	V		
13			V	V		
14			V	V		
17			V	V		
25	V	V	V	V	V	V
26	V	V	V	V	V	
30			V	V		
38			V	V	V	V
41			V	V	V	V
42			V	V	V	V
48			V	V	V	V
66	V	V	V	V	V	V
71			V	V	V	V

The LTE maximum power reduction (MPR) in accordance with 3GPP TS 36.101 is active all times during LTE operation. The allowed MPR for the maximum output power is specified in below.

Modulation	Channel Bandwidth / RB Configurations						LTE MPR Setting (dB)
	BW 1.4 MHz	BW 3 MHz	BW 5 MHz	BW 10 MHz	BW 15 MHz	BW 20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	1
16QAM	<= 5	<= 4	<= 8	<= 12	<= 16	<= 18	1
16QAM	> 5	> 4	> 8	> 12	> 16	> 18	2
64QAM	<= 5	<= 4	<= 8	<= 12	<= 16	<= 18	2
64QAM	> 5	> 4	> 8	> 12	> 16	> 18	3
256QAM	>= 1						5

Note: MPR is according to the standard and implemented in the circuit (mandatory).

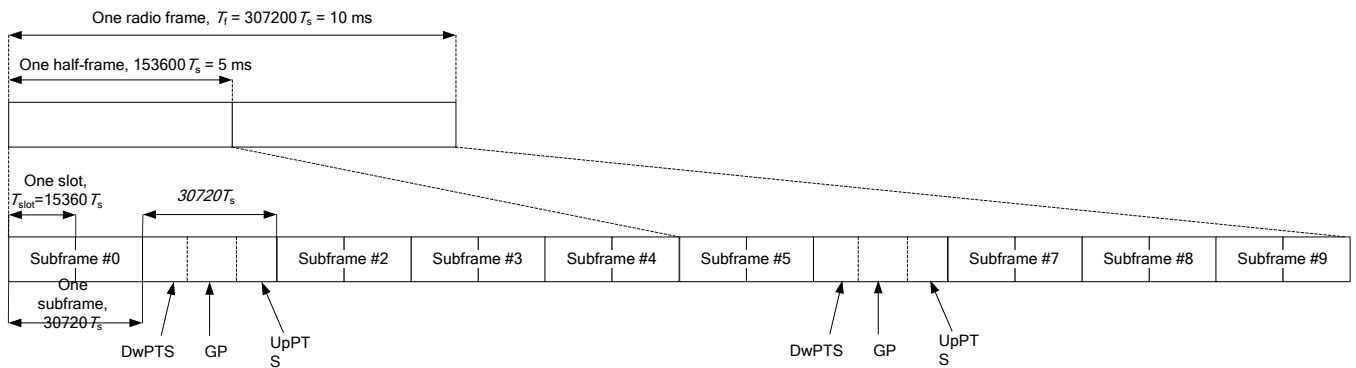
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In addition, the device is compliant with additional maximum power reduction (A-MPR) requirements defined in 3GPP TS 36.101 section 6.2.4 that was disabled for all FCC compliance testing.

During LTE SAR testing, the related parameters of operating band, channel bandwidth, uplink channel number, modulation type, and RB was set in base station simulator. When the EUT has registered and communicated to base station simulator, the simulator set to make EUT transmitting the maximum radiated power.

TDD-LTE Setup Configurations

According to KDB 941225 D05, SAR testing for TDD-LTE device must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP TDD-LTE configurations. The TDD-LTE of this device supports frame structure type 2 defined in 3GPP TS 36.211 section 4.2, and the frame structure configuration can be referred to below.



3GPP TS 36.211 Figure 4.2-1: Frame Structure Type 2

Special Subframe Configuration	Normal Cyclic Prefix in Downlink			Extended Cyclic Prefix in Downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal Cyclic Prefix in Uplink	Extended Cyclic Prefix in Uplink		Normal Cyclic Prefix in Uplink	Extended Cyclic Prefix in Uplink
0	6592 • Ts	2192 • Ts	2560 • Ts	7680 • Ts	2192 • Ts	2560 • Ts
1	19760 • Ts			20480 • Ts		
2	21952 • Ts			23040 • Ts		
3	24144 • Ts			25600 • Ts		
4	26336 • Ts	4384 • Ts	5120 • Ts	7680 • Ts	4384 • Ts	5120 • Ts
5	6592 • Ts			20480 • Ts		
6	19760 • Ts			23040 • Ts		
7	21952 • Ts			12800 • Ts		
8	24144 • Ts	-	-	-	-	-
9	13168 • Ts			-		

3GPP TS 36.211 Table 4.2-1: Configuration of Special Subframe

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Uplink-Downlink Configuration	Downlink-to-Uplink Switch-Point Periodicity	Subframe Number									
		0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U	U	U	D	S	U	U	U
1	5 ms	D	S	U	U	D	D	S	U	U	D
2	5 ms	D	S	U	D	D	D	S	U	D	D
3	10 ms	D	S	U	U	U	D	D	D	D	D
4	10 ms	D	S	U	U	D	D	D	D	D	D
5	10 ms	D	S	U	D	D	D	D	D	D	D
6	5 ms	D	S	U	U	U	D	S	U	U	D

3GPP TS 36.211 Table 4.2-2: Uplink-Downlink Configurations

The variety of different TD-LTE uplink-downlink configurations allows a network operator to allocate the network's capacity between uplink and downlink traffic to meet the needs of the network. The uplink duty cycle of these seven configurations can readily be computed and shown in below.

UL-DL Configuration	0	1	2	3	4	5	6
Highest Duty-Cycle	63.33%	43.33%	23.33%	31.67%	21.67%	11.67%	53.33%

Considering the highest transmission duty cycle, TDD-LTE was tested using Uplink-Downlink Configuration 0 with 6 uplink subframe and 2 special subframe. The special subframe was set to special subframe configuration 7 using extended cyclic prefix uplink. Therefore, SAR testing for TDD-LTE was performed at the maximum output power with highest transmission duty cycle of 63.33%.

LTE Downlink Carrier Aggregation(CA) Setup Configurations

LTE Carrier Aggregation (CA) was defined in 3GPP release 10 and higher. The LTE device in CA mode has one Primary Component Carrier (PCC) and one or more Secondary Component Carriers (SCC). PCC acts as the anchor carrier and can optionally cross-schedule data transmission on SCC. The RRC connection is only handled by one cell, the PCC for downlink and uplink communications. After making a data connection to the PCC, the LTE device adds the SCC on the downlink only. All uplink communications and acknowledgements remain identical to release 8 specifications on the PCC. The combinations of downlink carrier aggregation supported by this device are listed in below.

The Downlink Carrier Aggregation(CA) spec please refer to Appendix I.

<Considerations Related to WLAN for Setup and Testing>

In general, various vendor specific external test software and chipset based internal test modes are typically used for SAR measurement. These chipset based test mode utilities are generally hardware and manufacturer dependent, and often include substantial flexibility to reconfigure or reprogram a device. A Wi-Fi device must be configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools for SAR measurement. The test frequencies established using test mode must correspond to the actual channel frequencies. When 802.11 frame gaps are accounted for in the transmission, a maximum transmission duty factor of 92 - 96% is typically achievable in most test mode configurations. A minimum transmission duty factor of 85% is required to avoid certain hardware and device implementation issues related to wide range SAR scaling. In addition, a periodic transmission duty factor is required for current generation SAR systems to measure SAR correctly. The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

According to KDB 248227 D01, this device has installed WLAN engineering testing software which can provide continuous transmitting RF signal. During WLAN SAR testing, this device was operated to transmit continuously at the maximum transmission duty with specified transmission mode, operating frequency, lowest data rate, and maximum output power.

Initial Test Configuration

An initial test configuration is determined for OFDM transmission modes in 2.4 GHz and 5 GHz bands according to the channel bandwidth, modulation and data rate combination(s) with the highest maximum output power specified for production units in each standalone and aggregated frequency band. When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.

Subsequent Test Configuration

SAR measurement requirements for the remaining 802.11 transmission mode configurations that have not been tested in the initial test configuration are determined separately for each standalone and aggregated frequency band, in each exposure condition, according to the maximum output power specified for production units. Additional power measurements may be required to determine if SAR measurements are required for subsequent highest output power channels in a subsequent test configuration. When the highest reported SAR for the initial test configuration according to the initial test position or fixed exposure position requirements, is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for that subsequent test configuration.

SAR Test Configuration and Channel Selection

When multiple channel bandwidth configurations in a frequency band have the same specified maximum output power, the initial test configuration is using largest channel bandwidth, lowest order modulation, lowest data rate, and lowest order 802.11 mode (i.e., 802.11a is chosen over 802.11n then 802.11ac or 802.11g is chosen over 802.11n). After an initial test configuration is determined, if multiple test channels have the same measured maximum output power, the channel chosen for SAR measurement is determined according to the following.

- 1) The channel closest to mid-band frequency is selected for SAR measurement.
- 2) For channels with equal separation from mid-band frequency; for example, high and low channels or two mid-band channels, the higher frequency (number) channel is selected for SAR measurement.

Test Reduction for U-NII-1 (5.2 GHz) and U-NII-2A (5.3 GHz) Bands

For devices that operate in both U-NII bands using the same transmitter and antenna(s), SAR test reduction is determined according to the following.

- 1) When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition).
- 2) When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest reported SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for the band with lower maximum output power in that test configuration.

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<Considerations Related to Bluetooth for Setup and Testing>

This device has installed Bluetooth engineering testing software which can provide continuous transmitting RF signal. During Bluetooth SAR testing, this device was operated to transmit continuously at the maximum transmission duty with specified transmission mode, operating frequency, lowest data rate, and maximum output power.

The Bluetooth call box has been used during SAR measurement and the EUT was set to DH5 mode at the maximum output power. Its duty factor was calculated as below and the measured SAR for Bluetooth would be scaled to the 100% transmission duty factor to determine compliance.



Time-domain plot for Bluetooth transmission signal

The duty factor of Bluetooth signal has been calculated as following.

$$\text{Duty Factor} = \text{Pulse Width} / \text{Total Period} = (3.930 - 1.040) / (4.790 - 1.040) = 77.06 \%$$

4.2 EUT Testing Position

4.2.1 Body Exposure Conditions

For laptop PC, according to KDB 616217 D04, SAR evaluation is required for the bottom surface of the keyboard. This EUT was tested in the base of EUT directly against the flat phantom. The required minimum test separation distance for incorporating transmitters and antennas into laptop computer display is determined with the display screen opened at an angle of 90° to the keyboard compartment.

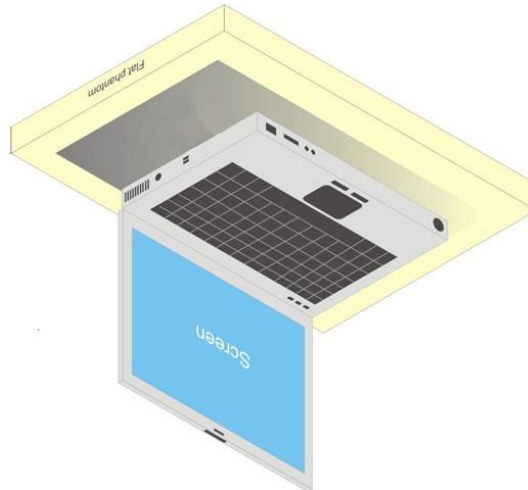


Fig-4.1 Illustration for Laptop Setup

For full-size tablet, according to KDB 616217 D04, SAR evaluation is required for back surface and edges of the devices. The back surface and edges of the tablet are tested with the tablet touching the phantom. Exposures from antennas through the front surface of the display section of a tablet are generally limited to the user's hands. Exposures to hands for typical consumer transmitters used in tablets are not expected to exceed the extremity SAR limit; therefore, SAR evaluation for the front surface of tablet display screens are generally not necessary. When voice mode is supported on a tablet and it is limited to speaker mode or headset operations only, additional SAR testing for this type of voice use is not required.

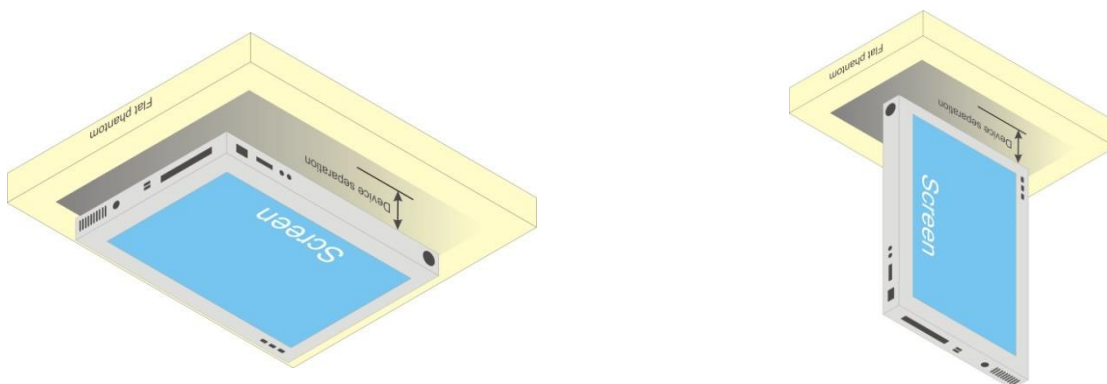


Fig-4.2 Illustration for Tablet Setup

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4.3 Tissue Verification

The measuring results for tissue simulating liquid are shown as below.

Frequency (MHz)	Liquid Temp. (°C)	Measured Conductivity (σ)	Measured Permittivity (ϵ_r)	Target Conductivity (σ)	Target Permittivity (ϵ_r)	Conductivity Deviation (%)	Permittivity Deviation (%)	Test Date
750	23.3	0.897	41.295	0.89	41.9	0.79	-1.44	May. 16, 2020
750	23.2	0.894	42.717	0.89	41.9	0.45	1.95	May. 22, 2020
750	23.1	0.886	43.472	0.89	41.9	-0.45	3.75	May. 29, 2020
750	23.2	0.892	42.799	0.89	41.9	0.22	2.15	May. 30, 2020
750	23.2	0.9	42.446	0.89	41.9	1.12	1.30	May. 31, 2020
835	23.3	0.901	42.636	0.9	41.5	0.11	2.74	Apr. 24, 2020
835	23.2	0.927	42.956	0.9	41.5	3.00	3.51	May. 26, 2020
835	23.2	0.973	42.375	0.9	41.5	8.11	2.11	May. 27, 2020
835	23.1	0.928	42.517	0.9	41.5	3.11	2.45	May. 29, 2020
835	23.3	0.915	41.04	0.9	41.5	1.67	-1.11	Jun. 01, 2020
1750	23.3	1.323	41.001	1.37	40.1	-3.43	2.25	Apr. 25, 2020
1750	23.2	1.323	39.022	1.37	40.1	-3.43	-2.69	May. 11, 2020
1750	23.2	1.348	41.105	1.37	40.1	-1.61	2.51	May. 14, 2020
1750	23.2	1.325	39.349	1.37	40.1	-3.28	-1.87	May. 25, 2020
1750	23.1	1.325	38.859	1.37	40.1	-3.28	-3.09	May. 28, 2020
1750	23.2	1.325	38.693	1.37	40.1	-3.28	-3.51	May. 29, 2020
1750	23.2	1.328	40.128	1.37	40.1	-3.07	0.07	May. 31, 2020
1750	23.2	1.319	39.296	1.37	40.1	-3.72	-2.00	Jun. 08, 2020
1900	23.3	1.454	40.457	1.4	40	3.86	1.14	Apr. 25, 2020
1900	23.2	1.458	38.53	1.4	40	4.14	-3.68	May. 11, 2020
1900	23.2	1.46	40.788	1.4	40	4.29	1.97	May. 14, 2020
1900	23.2	1.46	38.759	1.4	40	4.29	-3.10	May. 25, 2020
1900	23.2	1.456	38.805	1.4	40	4.00	-2.99	May. 26, 2020
1900	23.1	1.447	38.318	1.4	40	3.36	-4.21	May. 28, 2020
1900	23.2	1.464	38.114	1.4	40	4.57	-4.72	May. 29, 2020
1900	23.2	1.457	39.583	1.4	40	4.07	-1.04	May. 31, 2020
2300	23.3	1.717	39.723	1.67	39.5	2.81	0.56	May. 15, 2020
2300	23.2	1.721	40.22	1.67	39.5	3.05	1.82	May. 23, 2020
2300	23.3	1.707	38.627	1.67	39.5	2.22	-2.21	May. 31, 2020
2300	23.3	1.72	38.832	1.67	39.5	2.99	-1.69	Jun. 01, 2020
2450	23.2	1.881	39.13	1.8	39.2	4.50	-0.18	May. 12, 2020
2450	23.3	1.876	38.652	1.8	39.2	4.22	-1.40	May. 15, 2020
2450	23.3	1.87	39.052	1.8	39.2	3.89	-0.38	May. 21, 2020
2600	23.2	2.013	37.293	1.96	39	2.70	-4.38	May. 14, 2020
2600	23.3	2.052	38.62	1.96	39	4.69	-0.97	May. 16, 2020
2600	23.2	2.043	37.822	1.96	39	4.23	-3.02	May. 25, 2020
2600	23.2	2.049	37.692	1.96	39	4.54	-3.35	May. 26, 2020
2600	23.2	2.016	37.567	1.96	39	2.86	-3.67	May. 27, 2020
2600	23.1	2.03	37.41	1.96	39	3.57	-4.08	May. 28, 2020
2600	23.2	2.011	38.179	1.96	39	2.60	-2.11	May. 29, 2020
2600	23.3	2.051	37.81	1.96	39	4.64	-3.05	Jun. 01, 2020
3500	23.3	2.885	36.342	2.91	37.9	-0.86	-4.11	May. 15, 2020
3500	23.3	2.892	36.466	2.91	37.9	-0.62	-3.78	May. 18, 2020
3500	23.2	2.89	36.442	2.91	37.9	-0.69	-3.85	May. 26, 2020
3500	23.2	2.938	36.985	2.91	37.9	0.96	-2.41	May. 27, 2020
3500	23.2	2.893	36.577	2.91	37.9	-0.58	-3.49	Jun. 08, 2020
3500	23.1	2.962	37.276	2.91	37.9	1.79	-1.65	Aug. 19, 2020
3700	23.2	3.039	36.271	3.12	37.7	-2.60	-3.79	May. 18, 2020
3700	23.3	3.088	36.804	3.12	37.7	-1.03	-2.38	May. 27, 2020
3700	23.2	3.039	36.379	3.12	37.7	-2.60	-3.50	Jun. 08, 2020

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Frequency (MHz)	Liquid Temp. (°C)	Measured Conductivity (σ)	Measured Permittivity (ϵ_r)	Target Conductivity (σ)	Target Permittivity (ϵ_r)	Conductivity Deviation (%)	Permittivity Deviation (%)	Test Date
5250	23.2	4.78	35.347	4.71	35.9	1.49	-1.54	May. 12, 2020
5250	23.2	4.513	37.007	4.71	35.9	-4.18	3.08	May. 13, 2020
5250	23.3	4.573	36.637	4.71	35.9	-2.91	2.05	May. 21, 2020
5600	23.2	5.159	34.746	5.07	35.5	1.76	-2.12	May. 12, 2020
5600	23.2	4.854	36.544	5.07	35.5	-4.26	2.94	May. 13, 2020
5600	23.3	4.913	36.164	5.07	35.5	-3.10	1.87	May. 21, 2020
5750	23.2	5.313	34.366	5.22	35.4	1.78	-2.92	May. 12, 2020
5750	23.2	5.006	36.323	5.22	35.4	-4.10	2.61	May. 13, 2020
5750	23.3	5.061	35.952	5.22	35.4	-3.05	1.56	May. 21, 2020

Note:

The dielectric properties of the tissue simulating liquid have been measured within 24 hours before the SAR testing and within ± 10 % of the target values. Liquid temperature during the SAR testing has kept within ± 2 °C.

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4.4 System Validation

The SAR measurement system was validated according to procedures in KDB 865664 D01. The validation status in tabulated summary is as below.

Test Date	Probe S/N	Calibration Point	Measured Conductivity (σ)	Measured Permittivity (ϵ_r)	Validation for CW			Validation for Modulation		
					Sensitivity Range	Probe Linearity	Probe Isotropy	Modulation Type	Duty Factor	PAR
May. 16, 2020	3898	750	0.897	41.295	Pass	Pass	Pass	N/A	N/A	N/A
May. 22, 2020	3898	750	0.894	42.717	Pass	Pass	Pass	N/A	N/A	N/A
May. 29, 2020	7472	750	0.886	43.472	Pass	Pass	Pass	N/A	N/A	N/A
May. 30, 2020	3898	750	0.892	42.799	Pass	Pass	Pass	N/A	N/A	N/A
May. 31, 2020	3898	750	0.9	42.446	Pass	Pass	Pass	N/A	N/A	N/A
Apr. 24, 2020	3971	835	0.901	42.636	Pass	Pass	Pass	N/A	N/A	N/A
May. 26, 2020	3898	835	0.927	42.956	Pass	Pass	Pass	N/A	N/A	N/A
May. 27, 2020	3898	835	0.973	42.375	Pass	Pass	Pass	N/A	N/A	N/A
May. 29, 2020	7472	835	0.928	42.517	Pass	Pass	Pass	N/A	N/A	N/A
Jun. 01, 2020	3898	835	0.915	41.04	Pass	Pass	Pass	N/A	N/A	N/A
Apr. 25, 2020	3971	1750	1.323	41.001	Pass	Pass	Pass	N/A	N/A	N/A
May. 11, 2020	7537	1750	1.323	39.022	Pass	Pass	Pass	N/A	N/A	N/A
May. 14, 2020	7537	1750	1.348	41.105	Pass	Pass	Pass	N/A	N/A	N/A
May. 25, 2020	3971	1750	1.325	39.349	Pass	Pass	Pass	N/A	N/A	N/A
May. 28, 2020	7472	1750	1.325	38.859	Pass	Pass	Pass	N/A	N/A	N/A
May. 29, 2020	3898	1750	1.325	38.693	Pass	Pass	Pass	N/A	N/A	N/A
May. 31, 2020	3898	1750	1.328	40.128	Pass	Pass	Pass	N/A	N/A	N/A
Jun. 08, 2020	3971	1750	1.319	39.296	Pass	Pass	Pass	N/A	N/A	N/A
Apr. 25, 2020	3971	1900	1.454	40.457	Pass	Pass	Pass	N/A	N/A	N/A
May. 11, 2020	7537	1900	1.458	38.53	Pass	Pass	Pass	N/A	N/A	N/A
May. 14, 2020	7537	1900	1.46	40.788	Pass	Pass	Pass	N/A	N/A	N/A
May. 25, 2020	3971	1900	1.46	38.759	Pass	Pass	Pass	N/A	N/A	N/A
May. 26, 2020	3898	1900	1.456	38.805	Pass	Pass	Pass	N/A	N/A	N/A
May. 28, 2020	7472	1900	1.447	38.318	Pass	Pass	Pass	N/A	N/A	N/A
May. 29, 2020	3898	1900	1.464	38.114	Pass	Pass	Pass	N/A	N/A	N/A
May. 31, 2020	3898	1900	1.457	39.583	Pass	Pass	Pass	N/A	N/A	N/A
May. 15, 2020	3898	2300	1.717	39.723	Pass	Pass	Pass	N/A	N/A	N/A
May. 23, 2020	3898	2300	1.721	40.22	Pass	Pass	Pass	N/A	N/A	N/A
May. 31, 2020	3898	2300	1.707	38.627	Pass	Pass	Pass	N/A	N/A	N/A
Jun. 01, 2020	3898	2300	1.72	38.832	Pass	Pass	Pass	N/A	N/A	N/A
May. 12, 2020	7472	2450	1.881	39.13	Pass	Pass	Pass	OFDM	N/A	Pass
May. 15, 2020	3898	2450	1.876	38.652	Pass	Pass	Pass	OFDM	N/A	Pass
May. 21, 2020	3971	2450	1.87	39.052	Pass	Pass	Pass	OFDM	N/A	Pass
May. 14, 2020	7537	2600	2.013	37.293	Pass	Pass	Pass	N/A	N/A	N/A
May. 16, 2020	3898	2600	2.052	38.62	Pass	Pass	Pass	N/A	N/A	N/A
May. 25, 2020	3971	2600	2.043	37.822	Pass	Pass	Pass	N/A	N/A	N/A
May. 26, 2020	3898	2600	2.049	37.692	Pass	Pass	Pass	N/A	N/A	N/A
May. 27, 2020	3898	2600	2.016	37.567	Pass	Pass	Pass	N/A	N/A	N/A
May. 28, 2020	7472	2600	2.03	37.41	Pass	Pass	Pass	N/A	N/A	N/A
May. 29, 2020	3898	2600	2.011	38.179	Pass	Pass	Pass	N/A	N/A	N/A
Jun. 01, 2020	3898	2600	2.051	37.81	Pass	Pass	Pass	N/A	N/A	N/A
May. 15, 2020	3898	3500	2.885	36.342	Pass	Pass	Pass	N/A	N/A	N/A
May. 18, 2020	3650	3500	2.892	36.466	Pass	Pass	Pass	N/A	N/A	N/A
May. 26, 2020	3898	3500	2.89	36.442	Pass	Pass	Pass	N/A	N/A	N/A
May. 27, 2020	3650	3500	2.938	36.985	Pass	Pass	Pass	N/A	N/A	N/A
Jun. 08, 2020	3971	3500	2.893	36.577	Pass	Pass	Pass	N/A	N/A	N/A
Aug. 19, 2020	3820	3500	2.962	37.276	Pass	Pass	Pass	N/A	N/A	N/A

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Test Date	Probe S/N	Calibration Point	Measured Conductivity (σ)	Measured Permittivity (ϵ_r)	Validation for CW			Validation for Modulation		
May. 18, 2020	3650	3700	3.039	36.271	Pass	Pass	Pass	N/A	N/A	N/A
May. 27, 2020	3650	3700	3.088	36.804	Pass	Pass	Pass	N/A	N/A	N/A
Jun. 08, 2020	3971	3700	3.039	36.379	Pass	Pass	Pass	N/A	N/A	N/A
May. 12, 2020	7472	5250	4.78	35.347	Pass	Pass	Pass	OFDM	N/A	Pass
May. 13, 2020	7537	5250	4.513	37.007	Pass	Pass	Pass	OFDM	N/A	Pass
May. 21, 2020	3971	5250	4.573	36.637	Pass	Pass	Pass	OFDM	N/A	Pass
May. 12, 2020	7472	5600	5.159	34.746	Pass	Pass	Pass	OFDM	N/A	Pass
May. 13, 2020	7537	5600	4.854	36.544	Pass	Pass	Pass	OFDM	N/A	Pass
May. 21, 2020	3971	5600	4.913	36.164	Pass	Pass	Pass	OFDM	N/A	Pass
May. 12, 2020	7472	5750	5.313	34.366	Pass	Pass	Pass	OFDM	N/A	Pass
May. 13, 2020	7537	5750	5.006	36.323	Pass	Pass	Pass	OFDM	N/A	Pass
May. 21, 2020	3971	5750	5.061	35.952	Pass	Pass	Pass	OFDM	N/A	Pass

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4.5 System Verification

The measuring result for system verification is tabulated as below.

Test Date	Frequency (MHz)	1W Target SAR-1g (W/kg)	Measured SAR-1g (W/kg)	Normalized to 1W SAR-1g (W/kg)	Deviation (%)	Dipole S/N	Probe S/N	DAE S/N
May. 16, 2020	750	8.56	0.395	7.90	-7.71	1013	3898	914
May. 22, 2020	750	8.56	0.397	7.94	-7.24	1013	3898	914
May. 29, 2020	750	8.56	0.398	7.96	-7.01	1013	7472	579
May. 30, 2020	750	8.56	0.391	7.82	-8.64	1013	3898	914
May. 31, 2020	750	8.56	0.397	7.94	-7.24	1013	3898	914
Apr. 24, 2020	835	9.61	0.444	8.88	-7.60	4d121	3971	1277
May. 26, 2020	835	9.61	0.498	9.96	3.64	4d121	3898	914
May. 27, 2020	835	9.61	0.495	9.90	3.02	4d121	3898	914
May. 29, 2020	835	9.61	0.444	8.88	-7.60	4d121	7472	579
Jun. 01, 2020	835	9.61	0.488	9.76	1.56	4d121	3898	914
Apr. 25, 2020	1750	37.00	1.78	35.60	-3.78	1055	3971	1277
May. 11, 2020	1750	37.00	1.77	35.40	-4.32	1055	7537	1585
May. 14, 2020	1750	37.00	1.8	36.00	-2.70	1055	7537	1585
May. 25, 2020	1750	37.00	1.76	35.20	-4.86	1055	3971	1277
May. 28, 2020	1750	37.00	1.69	33.80	-8.65	1055	7472	579
May. 29, 2020	1750	37.00	1.74	34.80	-5.95	1055	3898	914
May. 31, 2020	1750	37.00	1.71	34.20	-7.57	1055	3898	914
Jun. 08, 2020	1750	37.00	1.74	34.80	-5.95	1055	3971	1277
Apr. 25, 2020	1900	40.30	1.94	38.80	-3.72	5d036	3971	1277
May. 11, 2020	1900	40.30	1.93	38.60	-4.22	5d036	7537	1585
May. 14, 2020	1900	40.30	1.95	39.00	-3.23	5d036	7537	1585
May. 25, 2020	1900	40.30	1.92	38.40	-4.71	5d036	3971	1277
May. 26, 2020	1900	40.30	1.92	38.40	-4.71	5d036	3898	914
May. 28, 2020	1900	40.30	1.92	38.40	-4.71	5d036	7472	579
May. 29, 2020	1900	40.30	1.96	39.20	-2.73	5d036	3898	914
May. 31, 2020	1900	40.30	1.94	38.80	-3.72	5d036	3898	914
May. 15, 2020	2300	48.80	2.39	47.80	-2.05	1004	3898	914
May. 23, 2020	2300	48.80	2.4	48.00	-1.64	1004	3898	914
May. 31, 2020	2300	48.80	2.48	49.60	1.64	1004	3898	914
Jun. 01, 2020	2300	48.80	2.43	48.60	-0.41	1004	3898	914
May. 12, 2020	2450	52.70	2.47	49.40	-6.26	737	7472	579
May. 15, 2020	2450	52.70	2.51	50.20	-4.74	737	3898	914
May. 21, 2020	2450	52.70	2.46	49.20	-6.64	737	3971	1277
May. 14, 2020	2600	57.30	2.77	55.40	-3.32	1020	7537	1585
May. 16, 2020	2600	57.30	2.81	56.20	-1.92	1020	3898	914
May. 25, 2020	2600	57.30	2.8	56.00	-2.27	1020	3971	1277
May. 26, 2020	2600	57.30	2.84	56.80	-0.87	1020	3898	914
May. 27, 2020	2600	57.30	2.78	55.60	-2.97	1020	3898	914
May. 28, 2020	2600	57.30	2.94	58.80	2.62	1020	7472	579
May. 29, 2020	2600	57.30	2.82	56.40	-1.57	1020	3898	914
Jun. 01, 2020	2600	57.30	2.84	56.80	-0.87	1020	3898	914
May. 15, 2020	3500	67.40	3.08	61.60	-8.61	1007	3898	914
May. 18, 2020	3500	67.40	3.09	61.80	-8.31	1007	3650	1431
May. 26, 2020	3500	67.40	3.05	61.00	-9.50	1007	3898	914
May. 27, 2020	3500	67.40	3.12	62.40	-7.42	1007	3650	1431
Jun. 08, 2020	3500	67.40	3.31	66.20	-1.78	1007	3971	1277
Aug. 19, 2020	3500	67.40	3.18	63.60	-5.64	1007	3820	393
May. 18, 2020	3700	67.20	3.48	69.60	3.57	1017	3650	1431
May. 27, 2020	3700	67.20	3.42	68.40	1.79	1017	3650	1431
Jun. 08, 2020	3700	67.20	3.46	69.20	2.98	1017	3971	1277

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Test Date	Frequency (MHz)	1W Target SAR-1g (W/kg)	Measured SAR-1g (W/kg)	Normalized to 1W SAR-1g (W/kg)	Deviation (%)	Dipole S/N	Probe S/N	DAE S/N
May. 12, 2020	5250	79.70	3.78	75.60	-5.14	1019	7472	579
May. 13, 2020	5250	79.70	3.61	72.20	-9.41	1019	7537	1585
May. 21, 2020	5250	79.70	3.64	72.80	-8.66	1019	3971	1277
May. 12, 2020	5600	83.80	3.97	79.40	-5.25	1019	7472	579
May. 13, 2020	5600	83.80	3.99	79.80	-4.77	1019	7537	1585
May. 21, 2020	5600	83.80	4.01	80.20	-4.30	1019	3971	1277
May. 12, 2020	5750	80.40	3.7	74.00	-7.96	1019	7472	579
May. 13, 2020	5750	80.40	3.82	76.40	-4.98	1019	7537	1585
May. 21, 2020	5750	80.40	3.77	75.40	-6.22	1019	3971	1277

Note:

Comparing to the reference SAR value provided by SPEAG in dipole calibration certificate, the deviation of system check results is within its specification of 10 %. The result indicates the system check can meet the variation criterion and the plots please refer to Appendix A of this report.

4.6 Maximum Output Power

4.6.1 Maximum Target Conducted Power

Refer to Appendix E

4.6.2 Measured Conducted Power Result

Refer to Appendix F

4.7 SAR Testing Results

4.7.1 SAR Test Reduction Considerations

<KDB 447498 D01, General RF Exposure Guidance>

Testing of other required channels within the operating mode of a frequency band is not required when the reported SAR for the mid-band or highest output power channel is:

- (1) ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
- (2) ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
- (3) ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

When SAR is not measured at the maximum power level allowed for production units, the measured SAR will be scaled to the maximum tune-up tolerance limit to determine compliance. The scaling factor for the tune-up power is defined as maximum tune-up limit (mW) / measured conducted power (mW). The reported SAR would be calculated by measured SAR x tune-up power scaling factor.

The SAR has been measured with highest transmission duty factor supported by the test mode tools for WLAN and/or Bluetooth. When the transmission duty factor could not achieve 100%, the reported SAR will be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up power. The scaling factor for the duty factor is defined as 100% / transmission duty cycle (%). The reported SAR would be calculated by measured SAR x tune-up power scaling factor x duty cycle scaling factor.

<KDB 941225 D01, 3G SAR Measurement Procedures>

The mode tested for SAR is referred to as the primary mode. The equivalent modes considered for SAR test reduction are denoted as secondary modes. Both primary and secondary modes must be in the same frequency band. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq 1/4$ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.

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<KDB 941225 D05, SAR Evaluation Considerations for LTE Devices>

(1) QPSK with 1 RB and 50% RB allocation

Start with the largest channel bandwidth and measure SAR, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel. When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.

(2) QPSK with 100% RB allocation

SAR is not required when the highest maximum output power for 100% RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.

(3) Higher order modulations

SAR is required only when the highest maximum output power for the configuration in the higher order modulation is $> 1/2$ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

(4) Other channel bandwidth

SAR is required when the highest maximum output power of the smaller channel bandwidth is $> 1/2$ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.

<Power Confirmation for SAR Test Exclusion for LTE Downlink CA>

According to KDB 941225 D05A, the uplink maximum output power below was measured with downlink CA active on the channel with highest measured maximum output power when downlink CA is inactive. The downlink SCC channel was paired with the uplink channel as normal operation. For intra-band contiguous CA, the downlink channel spacing between the component carriers was set to multiple of 300 kHz less than the nominal channel spacing per section 5.4.1A of 3GPP TS36.521. For intra-band non-contiguous CA, the downlink channel spacing between the component carriers was set to maximum separation from PCC and remain fully within the downlink transmission band. For Inter-band CA, the SCC downlink channel was set to near the middle of its transmission band.

Power Measurements for Intra-Band Contiguous Downlink CA

Refer to Appendix F

Summary for SAR Test Exclusion for LTE Downlink CA

Per power confirmation results in above, the uplink maximum output power with downlink CA active remains within the specified tune-up tolerance and not more than 0.25 dB higher than the maximum output power with downlink CA inactive. According to KDB 941225 D05A, the SAR test exclusion applies to LTE downlink CA operation.

SAR Test Report

<Power Confirmation for SAR Testing for LTE Uplink CA>

The conducted power for uplink CA active was measured on the highest reported SAR configuration for each exposure condition with both two carrier components was set to largest channel bandwidth.

Refer to Appendix F

<KDB 248227 D01, SAR Guidance for Wi-Fi Transmitters>

- (1) For handsets operating next to ear, hotspot mode or mini-tablet configurations, the initial test position procedures were applied. The test position with the highest extrapolated peak SAR will be used as the initial test position. When the reported SAR of initial test position is ≤ 0.4 W/kg, SAR testing for remaining test positions is not required. Otherwise, SAR is evaluated at the subsequent highest peak SAR positions until the reported SAR result is ≤ 0.8 W/kg or all test positions are measured.
- (2) For WLAN 2.4 GHz, the highest measured maximum output power channel for DSSS was selected for SAR measurement. When the reported SAR is ≤ 0.8 W/kg, no further SAR testing is required. Otherwise, SAR is evaluated at the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel. For OFDM modes (802.11g/n), SAR is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and it is ≤ 1.2 W/kg.
- (3) For WLAN 5GHz, the initial test configuration was selected according to the transmission mode with the highest maximum output power. When the reported SAR of initial test configuration is > 0.8 W/kg, SAR is required for the subsequent highest measured output power channel until the reported SAR result is ≤ 1.2 W/kg or all required channels are measured. For other transmission modes, SAR is not required when the highest reported SAR for initial test configuration is adjusted by the ratio of subsequent test configuration to initial test configuration specified maximum output power and it is ≤ 1.2 W/kg.
- (4) For WLAN MIMO mode, the power-based standalone SAR test exclusion or the sum of SAR provision in KDB 447498 to determine simultaneous transmission SAR test exclusion should be applied. Otherwise, SAR for MIMO mode will be measured with all applicable antennas transmitting simultaneously at the specified maximum output power of MIMO operation.

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4.7.2 SAR Results for Body Exposure Condition

Tablet Mode

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	Sample	Ant Status	P-sensor	Battery	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled 1g SAR (W/kg)
	WCDMA II	RMC12.2K	Rear Face	25	9538	1	Ant 0	w/o	6Cell	24.50	24.50	1.00	0.13	0.071	0.07
	WCDMA II	RMC12.2K	Left Side	0	9538	1	Ant 0	w/o	6Cell	24.50	24.50	1.00	-0.16	0.181	0.18
	WCDMA II	RMC12.2K	Right Side	0	9538	1	Ant 0	w/o	6Cell	24.50	24.50	1.00	-0.05	0.051	0.05
	WCDMA II	RMC12.2K	Top Side	0	9538	1	Ant 0	w/o	6Cell	24.50	24.50	1.00	0	<0.001	0.00
	WCDMA II	RMC12.2K	Bottom Side	20	9538	1	Ant 0	w/o	6Cell	24.50	24.50	1.00	0.11	0.077	0.08
01	WCDMA II	RMC12.2K	Rear Face	0	9538	1	Ant 0	w/	6Cell	13.00	12.90	1.02	-0.02	0.340	0.35
	WCDMA II	RMC12.2K	Bottom Side	0	9538	1	Ant 0	w/	6Cell	13.00	12.90	1.02	-0.03	0.122	0.12
	WCDMA II	RMC12.2K	Rear Face	0	9262	1	Ant 0	w/	6Cell	13.00	12.62	1.09	-0.17	0.294	0.32
	WCDMA II	RMC12.2K	Rear Face	0	9400	1	Ant 0	w/	6Cell	13.00	12.88	1.03	0.05	0.322	0.33
	WCDMA II	RMC12.2K	Rear Face	0	9538	2	Ant 0	w/	6Cell	13.00	12.90	1.02	0.03	0.319	0.33
	WCDMA II	RMC12.2K	Rear Face	0	9538	3	Ant 0	w/	4Cell	13.00	12.90	1.02	0.12	0.327	0.33
	WCDMA II	RMC12.2K	Rear Face	0	9538	4	Ant 0	w/	4Cell	13.00	12.90	1.02	0.15	0.305	0.31
	WCDMA IV	RMC12.2K	Rear Face	25	1413	1	Ant 0	w/o	6Cell	24.50	24.50	1.00	0.19	0.105	0.11
	WCDMA IV	RMC12.2K	Left Side	0	1413	1	Ant 0	w/o	6Cell	24.50	24.50	1.00	-0.09	0.265	0.27
	WCDMA IV	RMC12.2K	Right Side	0	1413	1	Ant 0	w/o	6Cell	24.50	24.50	1.00	-0.15	0.079	0.08
	WCDMA IV	RMC12.2K	Top Side	0	1413	1	Ant 0	w/o	6Cell	24.50	24.50	1.00	0	<0.001	0.00
	WCDMA IV	RMC12.2K	Bottom Side	20	1413	1	Ant 0	w/o	6Cell	24.50	24.50	1.00	0.11	0.148	0.15
02	WCDMA IV	RMC12.2K	Rear Face	0	1312	1	Ant 0	w/	6Cell	16.00	16.00	1.00	0.16	0.645	0.65
	WCDMA IV	RMC12.2K	Bottom Side	0	1312	1	Ant 0	w/	6Cell	16.00	16.00	1.00	-0.04	0.329	0.33
	WCDMA IV	RMC12.2K	Rear Face	0	1413	1	Ant 0	w/	6Cell	16.00	15.91	1.02	-0.09	0.638	0.65
	WCDMA IV	RMC12.2K	Rear Face	0	1513	1	Ant 0	w/	6Cell	16.00	15.97	1.01	-0.11	0.625	0.63
	WCDMA IV	RMC12.2K	Rear Face	0	1312	2	Ant 0	w/	6Cell	16.00	16.00	1.00	0.09	0.601	0.60
	WCDMA IV	RMC12.2K	Rear Face	0	1312	3	Ant 0	w/	4Cell	16.00	16.00	1.00	0.12	0.615	0.62
	WCDMA IV	RMC12.2K	Rear Face	0	1312	4	Ant 0	w/	4Cell	16.00	16.00	1.00	-0.04	0.593	0.59
	WCDMA V	RMC12.2K	Rear Face	25	4182	1	Ant 0	w/o	6Cell	24.50	24.44	1.01	0.15	0.074	0.07
	WCDMA V	RMC12.2K	Left Side	0	4182	1	Ant 0	w/o	6Cell	24.50	24.44	1.01	-0.08	0.188	0.19
	WCDMA V	RMC12.2K	Right Side	0	4182	1	Ant 0	w/o	6Cell	24.50	24.44	1.01	-0.02	0.056	0.06
	WCDMA V	RMC12.2K	Top Side	0	4182	1	Ant 0	w/o	6Cell	24.50	24.44	1.01	0	<0.001	0.00
	WCDMA V	RMC12.2K	Bottom Side	20	4182	1	Ant 0	w/o	6Cell	24.50	24.44	1.01	-0.05	0.081	0.08
03	WCDMA V	RMC12.2K	Rear Face	0	4132	1	Ant 0	w/	6Cell	20.50	20.45	1.01	-0.05	0.973	0.98
	WCDMA V	RMC12.2K	Bottom Side	0	4132	1	Ant 0	w/	6Cell	20.50	20.45	1.01	-0.13	0.479	0.48
	WCDMA V	RMC12.2K	Rear Face	0	4182	1	Ant 0	w/	6Cell	20.50	20.40	1.02	0.18	0.936	0.95
	WCDMA V	RMC12.2K	Rear Face	0	4233	1	Ant 0	w/	6Cell	20.50	20.38	1.03	-0.19	0.945	0.97
	WCDMA V	RMC12.2K	Rear Face	0	4132	2	Ant 0	w/	6Cell	20.50	20.45	1.01	0.16	0.892	0.90
	WCDMA V	RMC12.2K	Rear Face	0	4132	3	Ant 0	w/	4Cell	20.50	20.45	1.01	-0.18	0.904	0.91
	WCDMA V	RMC12.2K	Rear Face	0	4132	4	Ant 0	w/	4Cell	20.50	20.45	1.01	-0.17	0.875	0.88
	WCDMA V	RMC12.2K	Rear Face	0	4182	2	Ant 0	w/	6Cell	20.50	20.40	1.02	0.03	0.859	0.88
	WCDMA V	RMC12.2K	Rear Face	0	4233	2	Ant 0	w/	6Cell	20.50	20.38	1.03	0.19	0.835	0.86
	WCDMA V	RMC12.2K	Rear Face	0	4182	3	Ant 0	w/	4Cell	20.50	20.40	1.02	-0.19	0.871	0.89
	WCDMA V	RMC12.2K	Rear Face	0	4233	3	Ant 0	w/	4Cell	20.50	20.38	1.03	-0.01	0.846	0.87
	WCDMA V	RMC12.2K	Rear Face	0	4182	4	Ant 0	w/	4Cell	20.50	20.40	1.02	0.02	0.842	0.86
	WCDMA V	RMC12.2K	Rear Face	0	4233	4	Ant 0	w/	4Cell	20.50	20.38	1.03	0.06	0.819	0.84
	WCDMA V	RMC12.2K	Rear Face	0	4132	1	Ant 0	w/	6Cell	20.50	20.45	1.01	0.04	0.951	0.96

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

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Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB	offset	Sample	Ant Status	P-sensor	Battery	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (w/kg)	Scaled 1g SAR (w/kg)
	LTE 2	QPSK20M	Rear Face	25	19100	1	0	1	Ant 0	w/o	6Cell	24.00	23.53	1.11	0.11	0.117	0.13
	LTE 2	QPSK20M	Left Side	0	19100	1	0	1	Ant 0	w/o	6Cell	24.00	23.53	1.11	-0.17	0.286	0.32
	LTE 2	QPSK20M	Right Side	0	19100	1	0	1	Ant 0	w/o	6Cell	24.00	23.53	1.11	0.12	0.091	0.10
	LTE 2	QPSK20M	Top Side	0	19100	1	0	1	Ant 0	w/o	6Cell	24.00	23.53	1.11	0	<0.001	0.00
	LTE 2	QPSK20M	Bottom Side	20	19100	1	0	1	Ant 0	w/o	6Cell	24.00	23.53	1.11	0.15	0.073	0.08
	LTE 2	QPSK20M	Rear Face	25	19100	50	0	1	Ant 0	w/o	6Cell	23.00	22.66	1.08	-0.06	0.093	0.10
	LTE 2	QPSK20M	Left Side	0	19100	50	0	1	Ant 0	w/o	6Cell	23.00	22.66	1.08	-0.16	0.231	0.25
	LTE 2	QPSK20M	Right Side	0	19100	50	0	1	Ant 0	w/o	6Cell	23.00	22.66	1.08	0.03	0.067	0.07
	LTE 2	QPSK20M	Top Side	0	19100	50	0	1	Ant 0	w/o	6Cell	23.00	22.66	1.08	0	<0.001	0.00
	LTE 2	QPSK20M	Bottom Side	20	19100	50	0	1	Ant 0	w/o	6Cell	23.00	22.66	1.08	0.11	0.057	0.06
04	LTE 2	QPSK20M	Rear Face	0	19100	1	0	1	Ant 0	w/	6Cell	13.00	12.94	1.01	-0.12	0.548	0.55
	LTE 2	QPSK20M	Bottom Side	0	19100	1	0	1	Ant 0	w/	6Cell	13.00	12.94	1.01	0.1	0.241	0.24
	LTE 2	QPSK20M	Rear Face	0	19100	50	0	1	Ant 0	w/	6Cell	13.00	12.91	1.02	0.16	0.533	0.54
	LTE 2	QPSK20M	Bottom Side	0	19100	50	0	1	Ant 0	w/	6Cell	13.00	12.91	1.02	0.06	0.212	0.22
	LTE 2	QPSK20M	Rear Face	25	19100	1	0	1	Ant 1	w/o	6Cell	24.00	23.53	1.11	-0.04	0.093	0.10
	LTE 2	QPSK20M	Left Side	0	19100	1	0	1	Ant 1	w/o	6Cell	24.00	23.53	1.11	-0.08	0.061	0.07
	LTE 2	QPSK20M	Right Side	0	19100	1	0	1	Ant 1	w/o	6Cell	24.00	23.53	1.11	0.19	0.226	0.25
	LTE 2	QPSK20M	Top Side	0	19100	1	0	1	Ant 1	w/o	6Cell	24.00	23.53	1.11	0	<0.001	0.00
	LTE 2	QPSK20M	Bottom Side	20	19100	1	0	1	Ant 1	w/o	6Cell	24.00	23.53	1.11	0.02	0.107	0.12
	LTE 2	QPSK20M	Rear Face	25	19100	50	0	1	Ant 1	w/o	6Cell	23.00	22.66	1.08	0.01	0.071	0.08
	LTE 2	QPSK20M	Left Side	0	19100	50	0	1	Ant 1	w/o	6Cell	23.00	22.66	1.08	0.12	0.054	0.06
	LTE 2	QPSK20M	Right Side	0	19100	50	0	1	Ant 1	w/o	6Cell	23.00	22.66	1.08	-0.14	0.178	0.19
	LTE 2	QPSK20M	Top Side	0	19100	50	0	1	Ant 1	w/o	6Cell	23.00	22.66	1.08	0	<0.001	0.00
	LTE 2	QPSK20M	Bottom Side	20	19100	50	0	1	Ant 1	w/o	6Cell	23.00	22.66	1.08	-0.04	0.061	0.07
	LTE 2	QPSK20M	Rear Face	0	19100	1	0	1	Ant 1	w/	6Cell	13.00	12.94	1.01	0.07	0.408	0.41
	LTE 2	QPSK20M	Bottom Side	0	19100	1	0	1	Ant 1	w/	6Cell	13.00	12.94	1.01	-0.06	0.125	0.13
	LTE 2	QPSK20M	Rear Face	0	19100	50	0	1	Ant 1	w/	6Cell	13.00	12.91	1.02	0.1	0.402	0.41
	LTE 2	QPSK20M	Bottom Side	0	19100	50	0	1	Ant 1	w/	6Cell	13.00	12.91	1.02	-0.08	0.114	0.12
	LTE 2	QPSK20M	Rear Face	0	18700	1	0	1	Ant 0	w/	6Cell	13.00	12.76	1.06	0.03	0.469	0.50
	LTE 2	QPSK20M	Rear Face	0	18900	1	0	1	Ant 0	w/	6Cell	13.00	12.84	1.04	0.18	0.497	0.52
	LTE 2	QPSK20M	Rear Face	0	19100	1	0	2	Ant 0	w/	6Cell	13.00	12.94	1.01	-0.08	0.514	0.52
	LTE 2	QPSK20M	Rear Face	0	19100	1	0	3	Ant 0	w/	4Cell	13.00	12.94	1.01	0.19	0.527	0.53
	LTE 2	QPSK20M	Rear Face	0	19100	1	0	4	Ant 0	w/	4Cell	13.00	12.94	1.01	-0.17	0.491	0.50
	LTE 4	QPSK20M	Rear Face	25	20175	1	0	1	Ant 0	w/o	6Cell	24.00	23.87	1.03	0.05	0.131	0.13
	LTE 4	QPSK20M	Left Side	0	20175	1	0	1	Ant 0	w/o	6Cell	24.00	23.87	1.03	0.07	0.333	0.34
	LTE 4	QPSK20M	Right Side	0	20175	1	0	1	Ant 0	w/o	6Cell	24.00	23.87	1.03	-0.14	0.095	0.10
	LTE 4	QPSK20M	Top Side	0	20175	1	0	1	Ant 0	w/o	6Cell	24.00	23.87	1.03	0	<0.001	0.00
	LTE 4	QPSK20M	Bottom Side	20	20175	1	0	1	Ant 0	w/o	6Cell	24.00	23.87	1.03	0.07	0.189	0.19
	LTE 4	QPSK20M	Rear Face	25	20175	50	0	1	Ant 0	w/o	6Cell	23.00	23.31	1.04	0.06	0.104	0.11
	LTE 4	QPSK20M	Left Side	0	20175	50	0	1	Ant 0	w/o	6Cell	23.00	23.31	1.04	-0.09	0.262	0.27
	LTE 4	QPSK20M	Right Side	0	20175	50	0	1	Ant 0	w/o	6Cell	23.00	23.31	1.04	-0.02	0.075	0.08
	LTE 4	QPSK20M	Top Side	0	20175	50	0	1	Ant 0	w/o	6Cell	23.00	23.31	1.04	0	<0.001	0.00
	LTE 4	QPSK20M	Bottom Side	20	20175	50	0	1	Ant 0	w/o	6Cell	23.00	23.31	1.04	0.05	0.156	0.16
05	LTE 4	QPSK20M	Rear Face	0	20050	1	0	1	Ant 0	w/	6Cell	14.50	14.38	1.03	-0.05	0.599	0.62
	LTE 4	QPSK20M	Bottom Side	0	20050	1	0	1	Ant 0	w/	6Cell	14.50	14.38	1.03	-0.19	0.238	0.25
	LTE 4	QPSK20M	Rear Face	0	20050	50	0	1	Ant 0	w/	6Cell	14.50	14.34	1.04	-0.04	0.571	0.59
	LTE 4	QPSK20M	Bottom Side	0	20050	50	0	1	Ant 0	w/	6Cell	14.50	14.34	1.04	0.19	0.219	0.23
	LTE 4	QPSK20M	Rear Face	0	20175	1	0	1	Ant 0	w/	6Cell	14.50	14.13	1.09	-0.08	0.539	0.59
	LTE 4	QPSK20M	Rear Face	0	20300	1	0	1	Ant 0	w/	6Cell	14.50	14.07	1.10	-0.08	0.526	0.58
	LTE 4	QPSK20M	Rear Face	0	20050	1	0	2	Ant 0	w/	6Cell	14.50	14.38	1.03	0.19	0.579	0.60
	LTE 4	QPSK20M	Rear Face	0	20050	1	0	3	Ant 0	w/	4Cell	14.50	14.38	1.03	-0.17	0.592	0.61
	LTE 4	QPSK20M	Rear Face	0	20050	1	0	4	Ant 0	w/	4Cell	14.50	14.38	1.03	0.09	0.575	0.59
	LTE 5	QPSK10M	Rear Face	25	20450	1	0	1	Ant 0	w/o	6Cell	24.50	24.06	1.11	-0.08	0.056	0.06
	LTE 5	QPSK10M	Left Side	0	20450	1	0	1	Ant 0	w/o	6Cell	24.50	24.06	1.11	0.1	0.042	0.05
	LTE 5	QPSK10M	Right Side	0	20450	1	0	1	Ant 0	w/o	6Cell	24.50	24.06	1.11	0	< 0.001	0.00
	LTE 5	QPSK10M	Top Side	0	20450	1	0	1	Ant 0	w/o	6Cell	24.50	24.06	1.11	0	< 0.001	0.00
	LTE 5	QPSK10M	Bottom Side	20	20450	1	0	1	Ant 0	w/o	6Cell	24.50	24.06	1.11	0.03	0.064	0.07
	LTE 5	QPSK10M	Rear Face	25	20450	25	0	1	Ant 0	w/o	6Cell	23.50	23.04	1.11	0.17	0.045	0.05
	LTE 5	QPSK10M	Left Side	0	20450	25	0	1	Ant 0	w/o	6Cell	23.50	23.04	1.11	0.04	0.035	0.04
	LTE 5	QPSK10M	Right Side	0	20450	25	0	1	Ant 0	w/o	6Cell	23.50	23.04	1.11	0	< 0.001	0.00
	LTE 5	QPSK10M	Top Side	0	20450	25	0	1	Ant 0	w/o	6Cell	23.50	23.04	1.11	0	< 0.001	0.00
	LTE 5	QPSK10M	Bottom Side	20	20450	25	0	1	Ant 0	w/o	6Cell	23.50	23.04	1.11	0.1	0.052	0.06
06	LTE 5	QPSK10M	Rear Face	0	20450	1	0	1	Ant 0	w/	6Cell	17.00	16.98	1.00	0.02	0.562	0.56
	LTE 5	QPSK10M	Bottom Side	0	20450	1	0	1	Ant 0	w/	6Cell	17.00	16.98	1.00	-0.05	0.202	0.20
	LTE 5	QPSK10M	Rear Face	0	20450	25	0	1	Ant 0	w/	6Cell	17.00	16.91	1.02	-0.19	0.367	0.37
	LTE 5	QPSK10M	Bottom Side	0	20450	25	0	1	Ant 0	w/	6Cell	17.00	16.91	1.02	-0.09	0.207	0.21
	LTE 5	QPSK10M	Rear Face	0	20525	1	0	1	Ant 0	w/	6Cell	17.00	16.95	1.01	0.03	0.546	0.55
	LTE 5	QPSK10M	Rear Face	0	20600	1	0	1	Ant 0	w/	6Cell	17.00	16.91	1.02	-0.05	0.542	0.55
	LTE 5	QPSK10M	Rear Face	0	20450	1	0	2	Ant 0	w/	6Cell	17.00	16.98	1.00	-0.09	0.546	0.55
	LTE 5	QPSK10M	Rear Face	0	20450	1	0	3	Ant 0	w/	4Cell	17.00	16.98	1.00	0.17	0.547	0.55
	LTE 5	QPSK10M	Rear Face	0	20450	1	0	4	Ant 0	w/	4Cell	17.00	16.98	1.00	0.05	0.535	0.54
	LTE 5	QPSK10M	Rear Face	0	PCC:20476 SCC:20575	PCC:1 SCC:1	PCC:49 SCC:0	1	Ant 0	w/	6Cell	17.00	16.88	1.03	-0.04	0.531	0.55

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

SAR Test Report

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB	offset	Sample	Ant Status	P-sensor	Battery	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (w/kg)	Scaled 1g SAR (w/kg)
	LTE 7	QPSK20M	Rear Face	25	21350	1	0	1	Ant 0	w/o	6Cell	24.00	23.96	1.01	0.01	0.219	0.22
	LTE 7	QPSK20M	Left Side	0	21350	1	0	1	Ant 0	w/o	6Cell	24.00	23.96	1.01	-0.12	0.528	0.53
	LTE 7	QPSK20M	Right Side	0	21350	1	0	1	Ant 0	w/o	6Cell	24.00	23.96	1.01	0.05	0.157	0.16
	LTE 7	QPSK20M	Top Side	0	21350	1	0	1	Ant 0	w/o	6Cell	24.00	23.96	1.01	0	<0.001	0.00
	LTE 7	QPSK20M	Bottom Side	20	21350	1	0	1	Ant 0	w/o	6Cell	24.00	23.96	1.01	0	0.187	0.19
	LTE 7	QPSK20M	Rear Face	25	21350	50	0	1	Ant 0	w/o	6Cell	23.00	22.98	1.00	-0.18	0.177	0.18
	LTE 7	QPSK20M	Left Side	0	21350	50	0	1	Ant 0	w/o	6Cell	23.00	22.98	1.00	-0.14	0.45	0.45
	LTE 7	QPSK20M	Right Side	0	21350	50	0	1	Ant 0	w/o	6Cell	23.00	22.98	1.00	-0.06	0.134	0.13
	LTE 7	QPSK20M	Top Side	0	21350	50	0	1	Ant 0	w/o	6Cell	23.00	22.98	1.00	0	<0.001	0.00
	LTE 7	QPSK20M	Bottom Side	20	21350	50	0	1	Ant 0	w/o	6Cell	23.00	22.98	1.00	0.04	0.153	0.15
07	LTE 7	QPSK20M	Rear Face	0	21350	1	0	1	Ant 0	w/	6Cell	11.50	11.50	1.00	0.05	0.621	0.62
	LTE 7	QPSK20M	Bottom Side	0	21350	1	0	1	Ant 0	w/	6Cell	11.50	11.50	1.00	-0.07	0.161	0.16
	LTE 7	QPSK20M	Rear Face	0	21350	50	0	1	Ant 0	w/	6Cell	11.50	11.50	1.00	0.07	0.542	0.54
	LTE 7	QPSK20M	Bottom Side	0	21350	50	0	1	Ant 0	w/	6Cell	11.50	11.50	1.00	0.02	0.139	0.14
	LTE 7	QPSK20M	Rear Face	25	21350	1	0	1	Ant 1	w/o	6Cell	24.00	23.96	1.01	0.12	0.133	0.13
	LTE 7	QPSK20M	Left Side	0	21350	1	0	1	Ant 1	w/o	6Cell	24.00	23.96	1.01	-0.14	0.099	0.10
	LTE 7	QPSK20M	Right Side	0	21350	1	0	1	Ant 1	w/o	6Cell	24.00	23.96	1.01	-0.03	0.333	0.34
	LTE 7	QPSK20M	Top Side	0	21350	1	0	1	Ant 1	w/o	6Cell	24.00	23.96	1.01	0	<0.001	0.00
	LTE 7	QPSK20M	Bottom Side	20	21350	1	0	1	Ant 1	w/o	6Cell	24.00	23.96	1.01	0.14	0.142	0.14
	LTE 7	QPSK20M	Rear Face	25	21350	50	0	1	Ant 1	w/o	6Cell	23.00	22.98	1.00	0.15	0.131	0.13
	LTE 7	QPSK20M	Left Side	0	21350	50	0	1	Ant 1	w/o	6Cell	23.00	22.98	1.00	0.17	0.096	0.10
	LTE 7	QPSK20M	Right Side	0	21350	50	0	1	Ant 1	w/o	6Cell	23.00	22.98	1.00	-0.04	0.327	0.33
	LTE 7	QPSK20M	Top Side	0	21350	50	0	1	Ant 1	w/o	6Cell	23.00	22.98	1.00	0	<0.001	0.00
	LTE 7	QPSK20M	Bottom Side	20	21350	50	0	1	Ant 1	w/o	6Cell	23.00	22.98	1.00	-0.01	0.113	0.11
	LTE 7	QPSK20M	Rear Face	0	21350	1	0	1	Ant 1	w/	6Cell	11.50	11.50	1.00	-0.14	0.407	0.41
	LTE 7	QPSK20M	Bottom Side	0	21350	1	0	1	Ant 1	w/	6Cell	11.50	11.50	1.00	-0.02	0.213	0.21
	LTE 7	QPSK20M	Rear Face	0	21350	50	0	1	Ant 1	w/	6Cell	11.50	11.50	1.00	-0.05	0.579	0.58
	LTE 7	QPSK20M	Bottom Side	0	21350	50	0	1	Ant 1	w/	6Cell	11.50	11.50	1.00	-0.02	0.231	0.23
	LTE 7	QPSK20M	Rear Face	0	20850	1	0	1	Ant 0	w/	6Cell	11.50	11.05	1.11	0.05	0.535	0.59
	LTE 7	QPSK20M	Rear Face	0	21100	1	0	1	Ant 0	w/	6Cell	11.50	11.20	1.07	0.05	0.573	0.61
	LTE 7	QPSK20M	Rear Face	0	21350	1	0	2	Ant 0	w/	6Cell	11.50	11.50	1.00	0.05	0.603	0.60
	LTE 7	QPSK20M	Rear Face	0	21350	1	0	3	Ant 0	w/	4Cell	11.50	11.50	1.00	0.08	0.545	0.55
	LTE 7	QPSK20M	Rear Face	0	21350	1	0	4	Ant 0	w/	4Cell	11.50	11.50	1.00	-0.06	0.541	0.54
	LTE 7	QPSK20M	Rear Face	0	PCC:21152 SCC:21350	PCC:1 SCC:1	PCC:99 SCC:0	1	Ant 0	w/	6Cell	11.50	11.40	1.02	-0.08	0.536	0.55
	LTE 12	QPSK10M	Rear Face	25	23060	1	0	1	Ant 0	w/o	6Cell	24.50	24.00	1.12	0.16	0.098	0.11
	LTE 12	QPSK10M	Left Side	0	23060	1	0	1	Ant 0	w/o	6Cell	24.50	24.00	1.12	0	<0.001	0.00
	LTE 12	QPSK10M	Right Side	0	23060	1	0	1	Ant 0	w/o	6Cell	24.50	24.00	1.12	0	<0.001	0.00
	LTE 12	QPSK10M	Top Side	0	23060	1	0	1	Ant 0	w/o	6Cell	24.50	24.00	1.12	0	<0.001	0.00
	LTE 12	QPSK10M	Bottom Side	20	23060	1	0	1	Ant 0	w/o	6Cell	24.50	24.00	1.12	0.05	0.089	0.10
	LTE 12	QPSK10M	Rear Face	25	23060	25	0	1	Ant 0	w/o	6Cell	23.50	23.10	1.10	-0.13	0.078	0.09
	LTE 12	QPSK10M	Left Side	0	23060	25	0	1	Ant 0	w/o	6Cell	23.50	23.10	1.10	0	<0.001	0.00
	LTE 12	QPSK10M	Right Side	0	23060	25	0	1	Ant 0	w/o	6Cell	23.50	23.10	1.10	0	<0.001	0.00
	LTE 12	QPSK10M	Top Side	0	23060	25	0	1	Ant 0	w/o	6Cell	23.50	23.10	1.10	0	<0.001	0.00
	LTE 12	QPSK10M	Bottom Side	20	23060	25	0	1	Ant 0	w/o	6Cell	23.50	23.10	1.10	0.01	0.073	0.08
08	LTE 12	QPSK10M	Rear Face	0	23130	1	0	1	Ant 0	w/	6Cell	17.00	16.97	1.01	-0.11	0.678	0.68
	LTE 12	QPSK10M	Bottom Side	0	23130	1	0	1	Ant 0	w/	6Cell	17.00	16.97	1.01	-0.05	0.291	0.29
	LTE 12	QPSK10M	Rear Face	0	23130	25	0	1	Ant 0	w/	6Cell	17.00	16.95	1.01	0.03	0.481	0.49
	LTE 12	QPSK10M	Bottom Side	0	23130	25	0	1	Ant 0	w/	6Cell	17.00	16.95	1.01	0.05	0.283	0.29
	LTE 12	QPSK10M	Rear Face	0	23060	1	0	1	Ant 0	w/	6Cell	17.00	16.62	1.09	0.16	0.619	0.67
	LTE 12	QPSK10M	Rear Face	0	23095	1	0	1	Ant 0	w/	6Cell	17.00	16.74	1.06	0.12	0.622	0.66
	LTE 12	QPSK10M	Rear Face	0	23130	1	0	2	Ant 0	w/	6Cell	17.00	16.97	1.01	0.18	0.632	0.64
	LTE 12	QPSK10M	Rear Face	0	23130	1	0	3	Ant 0	w/	4Cell	17.00	16.97	1.01	0.1	0.628	0.63
	LTE 12	QPSK10M	Rear Face	0	23130	1	0	4	Ant 0	w/	4Cell	17.00	16.97	1.01	-0.15	0.606	0.61
	LTE 13	QPSK10M	Rear Face	25	23230	1	0	1	Ant 0	w/o	6Cell	24.50	24.04	1.11	0.16	0.099	0.11
	LTE 13	QPSK10M	Left Side	0	23230	1	0	1	Ant 0	w/o	6Cell	24.50	24.04	1.11	0	0.041	0.05
	LTE 13	QPSK10M	Right Side	0	23230	1	0	1	Ant 0	w/o	6Cell	24.50	24.04	1.11	0	<0.001	0.00
	LTE 13	QPSK10M	Top Side	0	23230	1	0	1	Ant 0	w/o	6Cell	24.50	24.04	1.11	0	<0.001	0.00
	LTE 13	QPSK10M	Bottom Side	20	23230	1	0	1	Ant 0	w/o	6Cell	24.50	24.04	1.11	0.03	0.094	0.10
	LTE 13	QPSK10M	Rear Face	25	23230	25	0	1	Ant 0	w/o	6Cell	23.50	23.23	1.06	-0.18	0.079	0.08
	LTE 13	QPSK10M	Left Side	0	23230	25	0	1	Ant 0	w/o	6Cell	23.50	23.23	1.06	0.14	0.031	0.03
	LTE 13	QPSK10M	Right Side	0	23230	25	0	1	Ant 0	w/o	6Cell	23.50	23.23	1.06	0	<0.001	0.00
	LTE 13	QPSK10M	Top Side	0	23230	25	0	1	Ant 0	w/o	6Cell	23.50	23.23	1.06	0	<0.001	0.00
	LTE 13	QPSK10M	Bottom Side	20	23230	25	0	1	Ant 0	w/o	6Cell	23.50	23.23	1.06	-0.07	0.078	0.08
09	LTE 13	QPSK10M	Rear Face	0	23230	1	0	1	Ant 0	w/	6Cell	18.00	17.94	1.01	-0.03	0.643	0.65
	LTE 13	QPSK10M	Bottom Side	0	23230	1	0	1	Ant 0	w/	6Cell	18.00	17.94	1.01	0.16	0.363	0.37
	LTE 13	QPSK10M	Rear Face	0	23230	25	0	1	Ant 0	w/	6Cell	18.00	17.89	1.03	0.08	0.624	0.64
	LTE 13	QPSK10M	Bottom Side	0	23230	25	0	1	Ant 0	w/	6Cell	18.00	17.89	1.03	-0.01	0.344	0.35
	LTE 13	QPSK10M	Rear Face	0	23230	1	0	2	Ant 0	w/	6Cell	18.00	17.94	1.01	-0.04	0.619	0.63
	LTE 13	QPSK10M	Rear Face	0	23230	1	0	3	Ant 0	w/	4Cell	18.00	17.94	1.01	0.17	0.631	0.64
	LTE 13	QPSK10M	Rear Face	0	23230	1	0	4	Ant 0	w/	4Cell	18.00	17.94	1.01	-0.03	0.626	0.63

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.



SAR Test Report

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB	offset	Sample	Ant Status	P-sensor	Battery	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (w/kg)	Scaled 1g SAR (w/kg)
	LTE 14	QPSK10M	Rear Face	25	23330	1	0	1	Ant 0	w/o	6Cell	24.50	24.07	1.10	-0.08	0.052	0.06
	LTE 14	QPSK10M	Left Side	0	23330	1	0	1	Ant 0	w/o	6Cell	24.50	24.07	1.10	-0.1	0.034	0.04
	LTE 14	QPSK10M	Right Side	0	23330	1	0	1	Ant 0	w/o	6Cell	24.50	24.07	1.10	0	< 0.001	0.00
	LTE 14	QPSK10M	Top Side	0	23330	1	0	1	Ant 0	w/o	6Cell	24.50	24.07	1.10	0	< 0.001	0.00
	LTE 14	QPSK10M	Bottom Side	20	23330	1	0	1	Ant 0	w/o	6Cell	24.50	24.07	1.10	0.09	0.048	0.05
	LTE 14	QPSK10M	Rear Face	25	23330	25	0	1	Ant 0	w/o	6Cell	23.50	23.15	1.08	0.11	0.041	0.04
	LTE 14	QPSK10M	Left Side	0	23330	25	0	1	Ant 0	w/o	6Cell	23.50	23.15	1.08	0	< 0.001	0.00
	LTE 14	QPSK10M	Right Side	0	23330	25	0	1	Ant 0	w/o	6Cell	23.50	23.15	1.08	0	< 0.001	0.00
	LTE 14	QPSK10M	Top Side	0	23330	25	0	1	Ant 0	w/o	6Cell	23.50	23.15	1.08	0	< 0.001	0.00
	LTE 14	QPSK10M	Bottom Side	20	23330	25	0	1	Ant 0	w/o	6Cell	23.50	23.15	1.08	0.11	0.044	0.05
10	LTE 14	QPSK10M	Rear Face	0	23330	1	0	1	Ant 0	w/	6Cell	20.50	20.47	1.01	-0.1	1.01	1.02
	LTE 14	QPSK10M	Bottom Side	0	23330	1	0	1	Ant 0	w/	6Cell	20.50	20.47	1.01	0.05	0.334	0.34
	LTE 14	QPSK10M	Rear Face	0	23330	25	0	1	Ant 0	w/	6Cell	20.50	20.40	1.02	0.11	0.666	0.68
	LTE 14	QPSK10M	Bottom Side	0	23330	25	0	1	Ant 0	w/	6Cell	20.50	20.40	1.02	0.01	0.157	0.16
	LTE 14	QPSK10M	Rear Face	0	23330	50	0	1	Ant 0	w/	6Cell	20.50	20.47	1.01	0.15	0.642	0.65
	LTE 14	QPSK10M	Rear Face	0	23330	1	0	2	Ant 0	w/	6Cell	20.50	20.47	1.01	-0.09	0.982	0.99
	LTE 14	QPSK10M	Rear Face	0	23330	1	0	3	Ant 0	w/	4Cell	20.50	20.47	1.01	0.17	0.995	1.00
	LTE 14	QPSK10M	Rear Face	0	23330	1	0	4	Ant 0	w/	4Cell	20.50	20.47	1.01	-0.03	0.971	0.98
	LTE 14	QPSK10M	Rear Face	0	23330	1	0	1	Ant 0	w/	6Cell	20.50	20.47	1.01	0	0.989	1.00
	LTE 17	QPSK10M	Rear Face	25	23790	1	0	1	Ant 0	w/o	6Cell	24.50	24.44	1.01	-0.08	0.097	0.10
	LTE 17	QPSK10M	Left Side	0	23790	1	0	1	Ant 0	w/o	6Cell	24.50	24.44	1.01	0	< 0.001	0.00
	LTE 17	QPSK10M	Right Side	0	23790	1	0	1	Ant 0	w/o	6Cell	24.50	24.44	1.01	0	< 0.001	0.00
	LTE 17	QPSK10M	Top Side	0	23790	1	0	1	Ant 0	w/o	6Cell	24.50	24.44	1.01	0	< 0.001	0.00
	LTE 17	QPSK10M	Bottom Side	20	23790	1	0	1	Ant 0	w/o	6Cell	24.50	24.44	1.01	-0.15	0.074	0.07
	LTE 17	QPSK10M	Rear Face	25	23790	25	0	1	Ant 0	w/o	6Cell	23.50	23.49	1.00	-0.16	0.075	0.08
	LTE 17	QPSK10M	Left Side	0	23790	25	0	1	Ant 0	w/o	6Cell	23.50	23.49	1.00	0	< 0.001	0.00
	LTE 17	QPSK10M	Right Side	0	23790	25	0	1	Ant 0	w/o	6Cell	23.50	23.49	1.00	0	< 0.001	0.00
	LTE 17	QPSK10M	Top Side	0	23790	25	0	1	Ant 0	w/o	6Cell	23.50	23.49	1.00	0	< 0.001	0.00
	LTE 17	QPSK10M	Bottom Side	20	23790	25	0	1	Ant 0	w/o	6Cell	23.50	23.49	1.00	0.08	0.062	0.06
	LTE 17	QPSK10M	Rear Face	0	23790	1	0	1	Ant 0	w/	6Cell	20.50	20.38	1.03	-0.13	1	1.03
	LTE 17	QPSK10M	Bottom Side	0	23790	1	0	1	Ant 0	w/	6Cell	20.50	20.38	1.03	0.02	0.495	0.51
	LTE 17	QPSK10M	Rear Face	0	23790	25	0	1	Ant 0	w/	6Cell	20.50	20.36	1.03	-0.14	0.993	1.02
	LTE 17	QPSK10M	Bottom Side	0	23790	25	0	1	Ant 0	w/	6Cell	20.50	20.36	1.03	-0.15	0.477	0.49
	LTE 17	QPSK10M	Rear Face	0	23790	50	0	1	Ant 0	w/	6Cell	20.50	20.36	1.03	0.11	1.02	1.05
11	LTE 17	QPSK10M	Rear Face	0	23780	1	0	1	Ant 0	w/	6Cell	20.50	20.32	1.04	-0.04	1.06	1.10
	LTE 17	QPSK10M	Rear Face	0	23800	1	0	1	Ant 0	w/	6Cell	20.50	20.26	1.06	0.06	1.03	1.09
	LTE 17	QPSK10M	Rear Face	0	23780	25	0	1	Ant 0	w/	6Cell	20.50	20.30	1.05	-0.08	1.03	1.08
	LTE 17	QPSK10M	Rear Face	0	23800	25	0	1	Ant 0	w/	6Cell	20.50	20.24	1.06	0.11	1.02	1.08
	LTE 17	QPSK10M	Rear Face	0	23780	1	0	2	Ant 0	w/	6Cell	20.50	20.32	1.04	0.13	0.989	1.03
	LTE 17	QPSK10M	Rear Face	0	23780	1	0	3	Ant 0	w/	4Cell	20.50	20.32	1.04	0.15	1.02	1.06
	LTE 17	QPSK10M	Rear Face	0	23780	1	0	4	Ant 0	w/	4Cell	20.50	20.32	1.04	0.08	0.979	1.02
	LTE 17	QPSK10M	Rear Face	0	23790	1	0	2	Ant 0	w/	6Cell	20.50	20.38	1.03	0.02	0.961	0.99
	LTE 17	QPSK10M	Rear Face	0	23800	1	0	2	Ant 0	w/	6Cell	20.50	20.26	1.06	0.01	0.952	1.01
	LTE 17	QPSK10M	Rear Face	0	23790	1	0	3	Ant 0	w/	4Cell	20.50	20.38	1.03	-0.07	0.966	0.99
	LTE 17	QPSK10M	Rear Face	0	23800	1	0	3	Ant 0	w/	4Cell	20.50	20.26	1.06	-0.14	0.949	1.01
	LTE 17	QPSK10M	Rear Face	0	23790	1	0	4	Ant 0	w/	4Cell	20.50	20.38	1.03	0.13	0.943	0.97
	LTE 17	QPSK10M	Rear Face	0	23800	1	0	4	Ant 0	w/	4Cell	20.50	20.26	1.06	0.06	0.924	0.98
	LTE 17	QPSK10M	Rear Face	0	23780	1	0	1	Ant 0	w/	6Cell	20.50	20.32	1.04	0.06	1.01	1.05
	LTE 25	QPSK20M	Rear Face	25	26590	1	0	1	Ant 0	w/o	6Cell	24.00	23.73	1.06	-0.15	0.085	0.09
	LTE 25	QPSK20M	Left Side	0	26590	1	0	1	Ant 0	w/o	6Cell	24.00	23.73	1.06	0.06	0.206	0.22
	LTE 25	QPSK20M	Right Side	0	26590	1	0	1	Ant 0	w/o	6Cell	24.00	23.73	1.06	-0.16	0.061	0.06
	LTE 25	QPSK20M	Top Side	0	26590	1	0	1	Ant 0	w/o	6Cell	24.00	23.73	1.06	0	< 0.001	0.00
	LTE 25	QPSK20M	Bottom Side	20	26590	1	0	1	Ant 0	w/o	6Cell	24.00	23.73	1.06	-0.12	0.052	0.06
	LTE 25	QPSK20M	Rear Face	25	26590	50	0	1	Ant 0	w/o	6Cell	23.00	22.79	1.05	0.09	0.063	0.07
	LTE 25	QPSK20M	Left Side	0	26590	50	0	1	Ant 0	w/o	6Cell	23.00	22.79	1.05	0.09	0.147	0.15
	LTE 25	QPSK20M	Right Side	0	26590	50	0	1	Ant 0	w/o	6Cell	23.00	22.79	1.05	-0.12	0.044	0.05
	LTE 25	QPSK20M	Top Side	0	26590	50	0	1	Ant 0	w/o	6Cell	23.00	22.79	1.05	0	< 0.001	0.00
	LTE 25	QPSK20M	Bottom Side	20	26590	50	0	1	Ant 0	w/o	6Cell	23.00	22.79	1.05	0.12	0.037	0.04
12	LTE 25	QPSK20M	Rear Face	0	26590	1	0	1	Ant 0	w/	6Cell	13.00	12.97	1.01	-0.17	0.383	0.39
	LTE 25	QPSK20M	Bottom Side	0	26590	1	0	1	Ant 0	w/	6Cell	13.00	12.97	1.01	0.15	0.194	0.20
	LTE 25	QPSK20M	Rear Face	0	26590	50	0	1	Ant 0	w/	6Cell	13.00	12.86	1.03	-0.06	0.367	0.38
	LTE 25	QPSK20M	Bottom Side	0	26590	50	0	1	Ant 0	w/	6Cell	13.00	12.86	1.03	0.03	0.188	0.19
	LTE 25	QPSK20M	Rear Face	0	26140	1	0	1	Ant 0	w/	6Cell	13.00	12.89	1.03	0.01	0.351	0.36
	LTE 25	QPSK20M	Rear Face	0	26365	1	0	1	Ant 0	w/	6Cell	13.00	12.95	1.01	0.02	0.344	0.35
	LTE 25	QPSK20M	Rear Face	0	26590	1	0	2	Ant 0	w/	6Cell	13.00	12.97	1.01	-0.02	0.355	0.36
	LTE 25	QPSK20M	Rear Face	0	26590	1	0	3	Ant 0	w/	4Cell	13.00	12.97	1.01	-0.08	0.369	0.37
	LTE 25	QPSK20M	Rear Face	0	26590	1	0	4	Ant 0	w/	4Cell	13.00	12.97	1.01	0.01	0.346	0.35

SAR Test Report

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB	offset	Sample	Ant Status	P-sensor	Battery	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (w/kg)	Scaled 1g SAR (w/kg)
	LTE 26	QPSK15M	Rear Face	25	26765	1	0	1	Ant 0	w/o	6Cell	24.50	24.32	1.04	-0.02	0.092	0.10
	LTE 26	QPSK15M	Left Side	0	26765	1	0	1	Ant 0	w/o	6Cell	24.50	24.32	1.04	0.1	0.079	0.08
	LTE 26	QPSK15M	Right Side	0	26765	1	0	1	Ant 0	w/o	6Cell	24.50	24.32	1.04	0	<0.001	0.00
	LTE 26	QPSK15M	Top Side	0	26765	1	0	1	Ant 0	w/o	6Cell	24.50	24.32	1.04	0	<0.001	0.00
	LTE 26	QPSK15M	Bottom Side	20	26765	1	0	1	Ant 0	w/o	6Cell	24.50	24.32	1.04	0.12	0.106	0.11
	LTE 26	QPSK15M	Rear Face	25	26765	36	0	1	Ant 0	w/o	6Cell	23.50	23.40	1.02	-0.16	0.068	0.07
	LTE 26	QPSK15M	Left Side	0	26765	36	0	1	Ant 0	w/o	6Cell	23.50	23.40	1.02	-0.13	0.073	0.07
	LTE 26	QPSK15M	Right Side	0	26765	36	0	1	Ant 0	w/o	6Cell	23.50	23.40	1.02	0	< 0.001	0.00
	LTE 26	QPSK15M	Top Side	0	26765	36	0	1	Ant 0	w/o	6Cell	23.50	23.40	1.02	0	< 0.001	0.00
	LTE 26	QPSK15M	Bottom Side	20	26765	36	0	1	Ant 0	w/o	6Cell	23.50	23.40	1.02	0.03	0.082	0.08
13	LTE 26	QPSK15M	Rear Face	0	26765	1	0	1	Ant 0	w/	6Cell	17.50	17.38	1.03	0.12	0.570	0.59
	LTE 26	QPSK15M	Bottom Side	0	26765	1	0	1	Ant 0	w/	6Cell	17.50	17.38	1.03	0.15	0.348	0.36
	LTE 26	QPSK15M	Rear Face	0	26765	36	0	1	Ant 0	w/	6Cell	17.50	17.27	1.05	-0.09	0.552	0.58
	LTE 26	QPSK15M	Bottom Side	0	26765	36	0	1	Ant 0	w/	6Cell	17.50	17.27	1.05	0.03	0.324	0.34
	LTE 26	QPSK15M	Rear Face	0	26865	1	0	1	Ant 0	w/	6Cell	17.50	17.15	1.08	-0.04	0.491	0.53
	LTE 26	QPSK15M	Rear Face	0	26965	1	0	1	Ant 0	w/	6Cell	17.50	17.10	1.10	0.01	0.502	0.55
	LTE 26	QPSK15M	Rear Face	0	26765	1	0	2	Ant 0	w/	6Cell	17.50	17.38	1.03	-0.01	0.509	0.52
	LTE 26	QPSK15M	Rear Face	0	26765	1	0	3	Ant 0	w/	4Cell	17.50	17.38	1.03	0.04	0.557	0.57
	LTE 26	QPSK15M	Rear Face	0	26765	1	0	4	Ant 0	w/	4Cell	17.50	17.38	1.03	0.08	0.494	0.51
	LTE 30	QPSK10M	Rear Face	25	27710	1	0	1	Ant 0	w/o	6Cell	23.00	22.87	1.03	0.05	0.088	0.09
	LTE 30	QPSK10M	Left Side	0	27710	1	0	1	Ant 0	w/o	6Cell	23.00	22.87	1.03	-0.09	0.186	0.19
	LTE 30	QPSK10M	Right Side	0	27710	1	0	1	Ant 0	w/o	6Cell	23.00	22.87	1.03	0.19	0.136	0.14
	LTE 30	QPSK10M	Top Side	0	27710	1	0	1	Ant 0	w/o	6Cell	23.00	22.87	1.03	-0.07	0.027	0.03
	LTE 30	QPSK10M	Bottom Side	20	27710	1	0	1	Ant 0	w/o	6Cell	23.00	22.87	1.03	0.13	0.122	0.13
	LTE 30	QPSK10M	Rear Face	25	27710	25	0	1	Ant 0	w/o	6Cell	22.00	21.90	1.02	-0.18	0.071	0.07
	LTE 30	QPSK10M	Left Side	0	27710	25	0	1	Ant 0	w/o	6Cell	22.00	21.90	1.02	-0.05	0.153	0.16
	LTE 30	QPSK10M	Right Side	0	27710	25	0	1	Ant 0	w/o	6Cell	22.00	21.90	1.02	0.1	0.113	0.12
	LTE 30	QPSK10M	Top Side	0	27710	25	0	1	Ant 0	w/o	6Cell	22.00	21.90	1.02	-0.14	0.022	0.02
	LTE 30	QPSK10M	Bottom Side	20	27710	25	0	1	Ant 0	w/o	6Cell	22.00	21.90	1.02	0.15	0.089	0.09
14	LTE 30	QPSK10M	Rear Face	0	27710	1	0	1	Ant 0	w/	6Cell	14.00	13.92	1.02	-0.03	1.01	1.03
	LTE 30	QPSK10M	Bottom Side	0	27710	1	0	1	Ant 0	w/	6Cell	14.00	13.92	1.02	-0.17	0.182	0.19
	LTE 30	QPSK10M	Rear Face	0	27710	25	0	1	Ant 0	w/	6Cell	14.00	13.74	1.06	-0.03	0.561	0.59
	LTE 30	QPSK10M	Bottom Side	0	27710	25	0	1	Ant 0	w/	6Cell	14.00	13.74	1.06	0.03	0.172	0.18
	LTE 30	QPSK10M	Rear Face	0	27710	50	0	1	Ant 0	w/	6Cell	14.00	13.57	1.10	-0.05	0.555	0.61
	LTE 30	QPSK10M	Rear Face	0	27710	1	0	2	Ant 0	w/	6Cell	14.00	13.92	1.02	-0.1	0.967	0.99
	LTE 30	QPSK10M	Rear Face	0	27710	1	0	3	Ant 0	w/	4Cell	14.00	13.92	1.02	0.12	0.997	1.02
	LTE 30	QPSK10M	Rear Face	0	27710	1	0	4	Ant 0	w/	4Cell	14.00	13.92	1.02	-0.03	0.956	0.98
	LTE 30	QPSK10M	Rear Face	0	27710	1	0	1	Ant 0	w/	6Cell	14.00	13.92	1.02	-0.12	0.989	1.01
	LTE 38	QPSK20M	Rear Face	25	38150	1	0	1	Ant 0	w/o	6Cell	24.00	23.99	1.00	0.03	0.131	0.13
	LTE 38	QPSK20M	Left Side	0	38150	1	0	1	Ant 0	w/o	6Cell	24.00	23.99	1.00	-0.01	0.318	0.32
	LTE 38	QPSK20M	Right Side	0	38150	1	0	1	Ant 0	w/o	6Cell	24.00	23.99	1.00	0.08	0.095	0.10
	LTE 38	QPSK20M	Top Side	0	38150	1	0	1	Ant 0	w/o	6Cell	24.00	23.99	1.00	0	<0.001	0.00
	LTE 38	QPSK20M	Bottom Side	20	38150	1	0	1	Ant 0	w/o	6Cell	24.00	23.99	1.00	0.01	0.108	0.11
	LTE 38	QPSK20M	Rear Face	25	38150	50	0	1	Ant 0	w/o	6Cell	23.00	22.98	1.00	-0.11	0.099	0.10
	LTE 38	QPSK20M	Left Side	0	38150	50	0	1	Ant 0	w/o	6Cell	23.00	22.98	1.00	0.13	0.252	0.25
	LTE 38	QPSK20M	Right Side	0	38150	50	0	1	Ant 0	w/o	6Cell	23.00	22.98	1.00	-0.02	0.075	0.07
	LTE 38	QPSK20M	Top Side	0	38150	50	0	1	Ant 0	w/o	6Cell	23.00	22.98	1.00	0	<0.001	0.00
	LTE 38	QPSK20M	Bottom Side	20	38150	50	0	1	Ant 0	w/o	6Cell	23.00	22.98	1.00	-0.17	0.084	0.08
15	LTE 38	QPSK20M	Rear Face	0	38150	1	0	1	Ant 0	w/	6Cell	14.00	14.00	1.00	0.06	0.579	0.58
	LTE 38	QPSK20M	Bottom Side	0	38150	1	0	1	Ant 0	w/	6Cell	14.00	14.00	1.00	-0.12	0.161	0.16
	LTE 38	QPSK20M	Rear Face	0	38150	50	0	1	Ant 0	w/	6Cell	14.00	13.95	1.01	0.02	0.545	0.55
	LTE 38	QPSK20M	Bottom Side	0	38150	50	0	1	Ant 0	w/	6Cell	14.00	13.95	1.01	0.19	0.144	0.15
	LTE 38	QPSK20M	Rear Face	0	37850	1	0	1	Ant 0	w/	6Cell	14.00	13.90	1.02	0.03	0.549	0.56
	LTE 38	QPSK20M	Rear Face	0	38000	1	0	1	Ant 0	w/	6Cell	14.00	13.97	1.01	0	0.525	0.53
	LTE 38	QPSK20M	Rear Face	0	38150	1	0	2	Ant 0	w/	6Cell	14.00	14.00	1.00	-0.12	0.522	0.52
	LTE 38	QPSK20M	Rear Face	0	38150	1	0	3	Ant 0	w/	4Cell	14.00	14.00	1.00	0.12	0.559	0.56
	LTE 38	QPSK20M	Rear Face	0	38150	1	0	4	Ant 0	w/	4Cell	14.00	14.00	1.00	0.08	0.509	0.51
	LTE 38	QPSK20M	Rear Face	0	PCC:37901 SCC:38099	PCC:1 SCC:1	PCC:99 SCC:0	1	Ant 0	w/	6Cell	14.00	13.89	1.03	-0.06	0.545	0.56

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

SAR Test Report

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB	offset	Sample	Ant Status	P-sensor	Battery	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (w/kg)	Scaled 1g SAR (w/kg)
	LTE 41	QPSK20M	Rear Face	25	41055	1	0	1	Ant 0	w/o	6Cell	24.00	24.00	1.00	-0.05	0.094	0.09
	LTE 41	QPSK20M	Left Side	0	41055	1	0	1	Ant 0	w/o	6Cell	24.00	24.00	1.00	0.13	0.224	0.22
	LTE 41	QPSK20M	Right Side	0	41055	1	0	1	Ant 0	w/o	6Cell	24.00	24.00	1.00	-0.02	0.067	0.07
	LTE 41	QPSK20M	Top Side	0	41055	1	0	1	Ant 0	w/o	6Cell	24.00	24.00	1.00	0	<0.001	0.00
	LTE 41	QPSK20M	Bottom Side	20	41055	1	0	1	Ant 0	w/o	6Cell	24.00	24.00	1.00	0.03	0.082	0.08
	LTE 41	QPSK20M	Rear Face	25	41055	50	0	1	Ant 0	w/o	6Cell	23.00	23.00	1.00	0.19	0.077	0.08
	LTE 41	QPSK20M	Left Side	0	41055	50	0	1	Ant 0	w/o	6Cell	23.00	23.00	1.00	-0.08	0.180	0.18
	LTE 41	QPSK20M	Right Side	0	41055	50	0	1	Ant 0	w/o	6Cell	23.00	23.00	1.00	-0.1	0.054	0.05
	LTE 41	QPSK20M	Top Side	0	41055	50	0	1	Ant 0	w/o	6Cell	23.00	23.00	1.00	0	<0.001	0.00
	LTE 41	QPSK20M	Bottom Side	20	41055	50	0	1	Ant 0	w/o	6Cell	23.00	23.00	1.00	0.11	0.061	0.06
17	LTE 41	QPSK20M	Rear Face	0	41055	1	0	1	Ant 0	w/	6Cell	14.00	14.00	1.00	0.06	0.548	0.55
	LTE 41	QPSK20M	Bottom Side	0	41055	1	0	1	Ant 0	w/	6Cell	14.00	14.00	1.00	-0.08	0.131	0.13
	LTE 41	QPSK20M	Rear Face	0	41055	50	0	1	Ant 0	w/	6Cell	14.00	13.90	1.02	-0.02	0.405	0.41
	LTE 41	QPSK20M	Bottom Side	0	41055	50	0	1	Ant 0	w/	6Cell	14.00	13.90	1.02	0.01	0.118	0.12
	LTE 41	QPSK20M	Rear Face	0	39750	1	0	1	Ant 0	w/	6Cell	14.00	13.29	1.18	-0.15	0.456	0.54
	LTE 41	QPSK20M	Rear Face	0	40185	1	0	1	Ant 0	w/	6Cell	14.00	13.63	1.09	-0.06	0.437	0.48
	LTE 41	QPSK20M	Rear Face	0	40620	1	0	1	Ant 0	w/	6Cell	14.00	13.97	1.01	-0.01	0.525	0.53
	LTE 41	QPSK20M	Rear Face	0	41490	1	0	1	Ant 0	w/	6Cell	14.00	13.86	1.03	0.04	0.433	0.45
	LTE 41	QPSK20M	Rear Face	0	41055	1	0	2	Ant 0	w/	6Cell	14.00	14.00	1.00	0.18	0.459	0.46
	LTE 41	QPSK20M	Rear Face	0	41055	1	0	3	Ant 0	w/	4Cell	14.00	14.00	1.00	-0.04	0.502	0.50
	LTE 41	QPSK20M	Rear Face	0	41055	1	0	4	Ant 0	w/	4Cell	14.00	14.00	1.00	-0.05	0.446	0.45
	LTE 41	QPSK20M	Rear Face	0	PCC:40529 SCC:40727	PCC:1 SCC:1	PCC:0 SCC:99	1	Ant 0	w/	6Cell	14.00	13.94	1.01	-0.01	0.481	0.49
	LTE 42	QPSK20M	Rear Face	25	43190	1	0	1	Ant 1	w/o	6Cell	24.00	23.94	1.01	0.12	0.253	0.26
	LTE 42	QPSK20M	Left Side	0	43190	1	0	1	Ant 1	w/o	6Cell	24.00	23.94	1.01	0.02	0.157	0.16
	LTE 42	QPSK20M	Right Side	0	43190	1	0	1	Ant 1	w/o	6Cell	24.00	23.94	1.01	0.07	0.532	0.54
	LTE 42	QPSK20M	Top Side	0	43190	1	0	1	Ant 1	w/o	6Cell	24.00	23.94	1.01	0.02	<0.001	0.00
	LTE 42	QPSK20M	Bottom Side	20	43190	1	0	1	Ant 1	w/o	6Cell	24.00	23.94	1.01	0.12	0.237	0.24
	LTE 42	QPSK20M	Rear Face	25	43190	50	0	1	Ant 1	w/o	6Cell	23.00	22.93	1.02	0.09	0.188	0.19
	LTE 42	QPSK20M	Left Side	0	43190	50	0	1	Ant 1	w/o	6Cell	23.00	22.93	1.02	-0.01	0.139	0.14
	LTE 42	QPSK20M	Right Side	0	43190	50	0	1	Ant 1	w/o	6Cell	23.00	22.93	1.02	-0.7	0.481	0.49
	LTE 42	QPSK20M	Top Side	0	43190	50	0	1	Ant 1	w/o	6Cell	23.00	22.93	1.02	0.13	<0.001	0.00
	LTE 42	QPSK20M	Bottom Side	20	43190	50	0	1	Ant 1	w/o	6Cell	23.00	22.93	1.02	0.1	0.191	0.19
	LTE 42	QPSK20M	Rear Face	0	43190	1	0	1	Ant 1	w/	6Cell	15.00	14.98	1.00	0.03	0.919	0.92
	LTE 42	QPSK20M	Bottom Side	0	43190	1	0	1	Ant 1	w/	6Cell	15.00	14.98	1.00	0.01	0.371	0.37
	LTE 42	QPSK20M	Rear Face	0	43190	50	0	1	Ant 1	w/	6Cell	15.00	14.91	1.02	-0.06	0.898	0.92
	LTE 42	QPSK20M	Bottom Side	0	43190	50	0	1	Ant 1	w/	6Cell	15.00	14.91	1.02	0.07	0.348	0.35
	LTE 42	QPSK20M	Rear Face	0	43190	100	0	1	Ant 1	w/	6Cell	15.00	14.88	1.03	0.06	0.897	0.92
	LTE 42	QPSK20M	Rear Face	0	43340	1	0	1	Ant 1	w/	6Cell	15.00	14.95	1.01	-0.03	0.935	0.94
	LTE 42	QPSK20M	Rear Face	0	43490	1	0	1	Ant 1	w/	6Cell	15.00	14.89	1.03	0.08	0.628	0.65
	LTE 42	QPSK20M	Rear Face	0	43340	50	0	1	Ant 1	w/	6Cell	15.00	14.88	1.03	0.08	0.897	0.92
	LTE 42	QPSK20M	Rear Face	0	43490	50	0	1	Ant 1	w/	6Cell	15.00	14.82	1.04	-0.17	0.615	0.64
	LTE 42	QPSK20M	Rear Face	0	43340	1	0	2	Ant 1	w/	6Cell	15.00	14.88	1.03	0.01	0.895	0.92
	LTE 42	QPSK20M	Rear Face	0	43340	1	0	3	Ant 1	w/	4Cell	15.00	14.88	1.03	-0.15	0.911	0.90
18	LTE 42	QPSK20M	Rear Face	0	43340	1	0	4	Ant 1	w/	4Cell	15.00	14.88	1.03	0.07	0.884	0.91
	LTE 42	QPSK20M	Rear Face	0	43190	1	0	2	Ant 1	w/	6Cell	15.00	14.98	1.00	0.02	0.681	0.68
	LTE 42	QPSK20M	Rear Face	0	43490	1	0	2	Ant 1	w/	6Cell	15.00	14.98	1.00	-0.1	0.654	0.65
	LTE 42	QPSK20M	Rear Face	0	43190	1	0	3	Ant 1	w/	4Cell	15.00	14.98	1.00	0.19	0.701	0.70
	LTE 42	QPSK20M	Rear Face	0	43490	1	0	3	Ant 1	w/	4Cell	15.00	14.82	1.04	-0.07	0.668	0.69
	LTE 42	QPSK20M	Rear Face	0	43190	1	0	4	Ant 1	w/	4Cell	15.00	14.82	1.04	0.12	0.671	0.70
	LTE 42	QPSK20M	Rear Face	0	43490	1	0	4	Ant 1	w/	4Cell	15.00	14.82	1.04	0.14	0.642	0.67
	LTE 42	QPSK20M	Rear Face	0	PCC:43190 SCC:43388	PCC:1 SCC:1	PCC:99 SCC:0	1	Ant 1	w/	6Cell	15.00	14.82	1.04	0.02	0.628	0.65
	LTE 42	QPSK20M	Rear Face	0	43340	1	0	1	Ant 1	w/	6Cell	15.00	14.95	1.01	0.16	0.921	0.93

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

SAR Test Report

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB	offset	Sample	Ant Status	P-sensor	Battery	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (w/kg)	Scaled 1g SAR (w/kg)
	LTE 48	QPSK20M	Rear Face	25	55340	1	0	1	Ant 1	w/o	6Cell	22.00	21.97	1.01	0.04	0.125	0.13
	LTE 48	QPSK20M	Left Side	0	55340	1	0	1	Ant 1	w/o	6Cell	22.00	21.97	1.01	-0.17	0.088	0.09
	LTE 48	QPSK20M	Right Side	0	55340	1	0	1	Ant 1	w/o	6Cell	22.00	21.97	1.01	-0.02	0.295	0.30
	LTE 48	QPSK20M	Top Side	0	55340	1	0	1	Ant 1	w/o	6Cell	22.00	21.97	1.01	0	<0.001	0.00
	LTE 48	QPSK20M	Bottom Side	20	55340	1	0	1	Ant 1	w/o	6Cell	22.00	21.97	1.01	0.11	0.122	0.12
	LTE 48	QPSK20M	Rear Face	25	55340	50	0	1	Ant 1	w/o	6Cell	21.00	20.99	1.00	-0.08	0.102	0.10
	LTE 48	QPSK20M	Left Side	0	55340	50	0	1	Ant 1	w/o	6Cell	21.00	20.99	1.00	0.15	0.074	0.07
	LTE 48	QPSK20M	Right Side	0	55340	50	0	1	Ant 1	w/o	6Cell	21.00	20.99	1.00	-0.07	0.249	0.25
	LTE 48	QPSK20M	Top Side	0	55340	50	0	1	Ant 1	w/o	6Cell	21.00	20.99	1.00	0	<0.001	0.00
	LTE 48	QPSK20M	Bottom Side	20	55340	50	0	1	Ant 1	w/o	6Cell	21.00	20.99	1.00	0.15	0.099	0.10
19	LTE 48	QPSK20M	Rear Face	0	56210	1	0	1	Ant 1	w/	6Cell	13.50	13.36	1.03	-0.13	0.611	0.63
	LTE 48	QPSK20M	Bottom Side	0	56210	1	0	1	Ant 1	w/	6Cell	13.50	13.36	1.03	0.05	0.149	0.15
	LTE 48	QPSK20M	Rear Face	0	56210	50	0	1	Ant 1	w/	6Cell	13.50	13.25	1.06	0	0.352	0.37
	LTE 48	QPSK20M	Bottom Side	0	56210	50	0	1	Ant 1	w/	6Cell	13.50	13.25	1.06	0.01	0.134	0.14
	LTE 48	QPSK20M	Rear Face	0	55340	1	0	1	Ant 1	w/	6Cell	13.50	13.13	1.09	0.12	0.567	0.62
	LTE 48	QPSK20M	Rear Face	0	55780	1	0	1	Ant 1	w/	6Cell	13.50	13.10	1.10	0.14	0.565	0.62
	LTE 48	QPSK20M	Rear Face	0	56640	1	0	1	Ant 1	w/	6Cell	13.50	13.29	1.05	-0.11	0.594	0.62
	LTE 48	QPSK20M	Rear Face	0	56210	1	0	2	Ant 1	w/	6Cell	13.50	13.36	1.03	0.11	0.589	0.61
	LTE 48	QPSK20M	Rear Face	0	56210	1	0	3	Ant 1	w/	4Cell	13.50	13.36	1.03	0.16	0.599	0.62
	LTE 48	QPSK20M	Rear Face	0	56210	1	0	4	Ant 1	w/	4Cell	13.50	13.36	1.03	-0.15	0.578	0.60
	LTE 48	QPSK20M	Rear Face	0	PCC:55891 SCC:56089	PCC:1 SCC:1	PCC:0 SCC:99	1	Ant 1	w/	6Cell	13.50	13.31	1.04	-0.05	0.489	0.51
	LTE 66	QPSK20M	Rear Face	25	132572	1	0	1	Ant 0	w/o	6Cell	24.00	23.95	1.01	-0.18	0.105	0.11
	LTE 66	QPSK20M	Left Side	0	132572	1	0	1	Ant 0	w/o	6Cell	24.00	23.95	1.01	0.04	0.246	0.25
	LTE 66	QPSK20M	Right Side	0	132572	1	0	1	Ant 0	w/o	6Cell	24.00	23.95	1.01	-0.17	0.073	0.07
	LTE 66	QPSK20M	Top Side	0	132572	1	0	1	Ant 0	w/o	6Cell	24.00	23.95	1.01	0	<0.001	0.00
	LTE 66	QPSK20M	Bottom Side	20	132572	1	0	1	Ant 0	w/o	6Cell	24.00	23.95	1.01	0.02	0.144	0.15
	LTE 66	QPSK20M	Rear Face	25	132572	50	0	1	Ant 0	w/o	6Cell	23.00	22.99	1.00	-0.01	0.077	0.08
	LTE 66	QPSK20M	Left Side	0	132572	50	0	1	Ant 0	w/o	6Cell	23.00	22.99	1.00	0.11	0.196	0.20
	LTE 66	QPSK20M	Right Side	0	132572	50	0	1	Ant 0	w/o	6Cell	23.00	22.99	1.00	-0.09	0.058	0.06
	LTE 66	QPSK20M	Top Side	0	132572	50	0	1	Ant 0	w/o	6Cell	23.00	22.99	1.00	0	<0.001	0.00
	LTE 66	QPSK20M	Bottom Side	20	132572	50	0	1	Ant 0	w/o	6Cell	23.00	22.99	1.00	0.05	0.128	0.13
	LTE 66	QPSK20M	Rear Face	0	132072	1	0	1	Ant 0	w/	6Cell	14.50	14.46	1.01	0.17	0.498	0.50
	LTE 66	QPSK20M	Bottom Side	0	132072	1	0	1	Ant 0	w/	6Cell	14.50	14.46	1.01	0.12	0.207	0.21
	LTE 66	QPSK20M	Rear Face	0	132072	50	0	1	Ant 0	w/	6Cell	14.50	14.33	1.04	0.05	0.474	0.49
	LTE 66	QPSK20M	Bottom Side	0	132072	50	0	1	Ant 0	w/	6Cell	14.50	14.33	1.04	0.06	0.194	0.20
	LTE 66	QPSK20M	Rear Face	0	132322	1	0	1	Ant 0	w/	6Cell	14.50	14.23	1.06	0.09	0.474	0.50
	LTE 66	QPSK20M	Rear Face	0	132572	1	0	1	Ant 0	w/	6Cell	14.50	14.10	1.10	-0.11	0.441	0.49
	LTE 66	QPSK20M	Rear Face	25	132572	1	0	1	Ant 1	w/o	6Cell	24.00	23.95	1.01	-0.03	0.078	0.08
	LTE 66	QPSK20M	Left Side	0	132572	1	0	1	Ant 1	w/o	6Cell	24.00	23.95	1.01	-0.15	0.054	0.05
	LTE 66	QPSK20M	Right Side	0	132572	1	0	1	Ant 1	w/o	6Cell	24.00	23.95	1.01	0.02	0.18	0.18
	LTE 66	QPSK20M	Top Side	0	132572	1	0	1	Ant 1	w/o	6Cell	24.00	23.95	1.01	0	<0.001	0.00
	LTE 66	QPSK20M	Bottom Side	20	132572	1	0	1	Ant 1	w/o	6Cell	24.00	23.95	1.01	0.03	0.072	0.07
	LTE 66	QPSK20M	Rear Face	25	132572	50	0	1	Ant 1	w/o	6Cell	23.00	22.99	1.00	-0.08	0.075	0.08
	LTE 66	QPSK20M	Left Side	0	132572	50	0	1	Ant 1	w/o	6Cell	23.00	22.99	1.00	-0.06	0.049	0.05
	LTE 66	QPSK20M	Right Side	0	132572	50	0	1	Ant 1	w/o	6Cell	23.00	22.99	1.00	-0.18	0.171	0.17
	LTE 66	QPSK20M	Top Side	0	132572	50	0	1	Ant 1	w/o	6Cell	23.00	22.99	1.00	0	<0.001	0.00
	LTE 66	QPSK20M	Bottom Side	20	132572	50	0	1	Ant 1	w/o	6Cell	23.00	22.99	1.00	0.04	0.061	0.06
	LTE 66	QPSK20M	Rear Face	0	132072	1	0	1	Ant 1	w/	6Cell	14.50	14.46	1.01	0.12	0.647	0.65
	LTE 66	QPSK20M	Bottom Side	0	132072	1	0	1	Ant 1	w/	6Cell	14.50	14.46	1.01	-0.19	0.177	0.18
	LTE 66	QPSK20M	Rear Face	0	132072	50	0	1	Ant 1	w/	6Cell	14.50	14.33	1.04	0.02	0.552	0.57
	LTE 66	QPSK20M	Bottom Side	0	132072	50	0	1	Ant 1	w/	6Cell	14.50	14.33	1.04	0.17	0.158	0.16
20	LTE 66	QPSK20M	Rear Face	0	132322	1	0	1	Ant 1	w/	6Cell	14.50	14.23	1.06	0.09	0.708	0.75
	LTE 66	QPSK20M	Rear Face	0	132572	1	0	1	Ant 1	w/	6Cell	14.50	14.10	1.10	0.02	0.671	0.74
	LTE 66	QPSK20M	Rear Face	0	132322	1	0	2	Ant 1	w/	6Cell	14.50	14.23	1.06	-0.09	0.651	0.69
	LTE 66	QPSK20M	Rear Face	0	132322	1	0	3	Ant 1	w/	4Cell	14.50	14.23	1.06	-0.04	0.683	0.72
	LTE 66	QPSK20M	Rear Face	0	132322	1	0	4	Ant 1	w/	4Cell	14.50	14.23	1.06	-0.03	0.662	0.70
	LTE 66	QPSK10M	Rear Face	0	PCC:132022 SCC:132121	PCC:1 SCC:1	PCC:0 SCC:49	1	Ant 0	w/	6Cell	14.50	14.35	1.04	-0.16	0.435	0.45
	LTE 66	QPSK20M	Rear Face	0	PCC:132072 SCC:132270	PCC:1 SCC:1	PCC:99 SCC:0	1	Ant 0	w/	6Cell	14.50	14.40	1.02	0.06	0.481	0.49

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

SAR Test Report

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB	offset	Sample	Ant Status	P-sensor	Battery	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (w/kg)	Scaled 1g SAR (w/kg)
	LTE 71	QPSK20M	Rear Face	25	133222	1	0	1	Ant 0	w/o	6Cell	24.50	24.47	1.01	0	< 0.001	0.00
	LTE 71	QPSK20M	Left Side	0	133222	1	0	1	Ant 0	w/o	6Cell	24.50	24.47	1.01	0	< 0.001	0.00
	LTE 71	QPSK20M	Right Side	0	133222	1	0	1	Ant 0	w/o	6Cell	24.50	24.47	1.01	0	< 0.001	0.00
	LTE 71	QPSK20M	Top Side	0	133222	1	0	1	Ant 0	w/o	6Cell	24.50	24.47	1.01	0	< 0.001	0.00
	LTE 71	QPSK20M	Bottom Side	20	133222	1	0	1	Ant 0	w/o	6Cell	24.50	24.47	1.01	0	< 0.001	0.00
	LTE 71	QPSK20M	Rear Face	25	133222	50	0	1	Ant 0	w/o	6Cell	23.50	23.39	1.03	0	< 0.001	0.00
	LTE 71	QPSK20M	Left Side	0	133222	50	0	1	Ant 0	w/o	6Cell	23.50	23.39	1.03	0	< 0.001	0.00
	LTE 71	QPSK20M	Right Side	0	133222	50	0	1	Ant 0	w/o	6Cell	23.50	23.39	1.03	0	< 0.001	0.00
	LTE 71	QPSK20M	Top Side	0	133222	50	0	1	Ant 0	w/o	6Cell	23.50	23.39	1.03	0	< 0.001	0.00
	LTE 71	QPSK20M	Bottom Side	20	133222	50	0	1	Ant 0	w/o	6Cell	23.50	23.39	1.03	0	< 0.001	0.00
21	LTE 71	QPSK20M	Rear Face	0	133222	1	0	1	Ant 0	w/	6Cell	20.00	19.93	1.02	0.03	0.599	0.61
	LTE 71	QPSK20M	Bottom Side	0	133222	1	0	1	Ant 0	w/	6Cell	20.00	19.93	1.02	0.16	0.138	0.14
	LTE 71	QPSK20M	Rear Face	0	133222	50	0	1	Ant 0	w/	6Cell	20.00	19.60	1.10	-0.02	0.387	0.43
	LTE 71	QPSK20M	Bottom Side	0	133222	50	0	1	Ant 0	w/	6Cell	20.00	19.60	1.10	0.17	0.124	0.14
	LTE 71	QPSK20M	Rear Face	0	133297	1	0	1	Ant 0	w/	6Cell	20.00	19.90	1.02	0.16	0.581	0.59
	LTE 71	QPSK20M	Rear Face	0	133372	1	0	1	Ant 0	w/	6Cell	20.00	19.73	1.06	-0.18	0.566	0.60
	LTE 71	QPSK20M	Rear Face	0	133222	1	0	2	Ant 0	w/	6Cell	20.00	19.93	1.02	-0.17	0.521	0.53
	LTE 71	QPSK20M	Rear Face	0	133222	1	0	3	Ant 0	w/	4Cell	20.00	19.93	1.02	-0.16	0.548	0.56
	LTE 71	QPSK20M	Rear Face	0	133222	1	0	4	Ant 0	w/	4Cell	20.00	19.93	1.02	0.07	0.505	0.52

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.



SAR Test Report

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB	offset	Sample	Ant Status	P-sensor	Battery	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (w/kg)	Scaled 1g SAR (w/kg)
	5G NR-n2	DFT-S_15KHz QPSK20M	Rear Face	25	380000	1	1	1	Ant 0	w/o	6Cell	24.00	23.82	1.04	0.01	0.084	0.09
	5G NR-n2	DFT-S_15KHz QPSK20M	Left Side	0	380000	1	1	1	Ant 0	w/o	6Cell	24.00	23.82	1.04	-0.12	0.213	0.22
	5G NR-n2	DFT-S_15KHz QPSK20M	Right Side	0	380000	1	1	1	Ant 0	w/o	6Cell	24.00	23.82	1.04	-0.15	0.064	0.07
	5G NR-n2	DFT-S_15KHz QPSK20M	Top Side	0	380000	1	1	1	Ant 0	w/o	6Cell	24.00	23.82	1.04	0	<0.001	0.00
	5G NR-n2	DFT-S_15KHz QPSK20M	Bottom Side	20	380000	1	1	1	Ant 0	w/o	6Cell	24.00	23.82	1.04	0.06	0.069	0.07
	5G NR-n2	DFT-S_15KHz QPSK20M	Rear Face	25	380000	50	25	1	Ant 0	w/o	6Cell	24.00	23.64	1.09	-0.09	0.064	0.07
	5G NR-n2	DFT-S_15KHz QPSK20M	Left Side	0	380000	50	25	1	Ant 0	w/o	6Cell	24.00	23.64	1.09	-0.11	0.152	0.17
	5G NR-n2	DFT-S_15KHz QPSK20M	Right Side	0	380000	50	25	1	Ant 0	w/o	6Cell	24.00	23.64	1.09	-0.09	0.045	0.05
	5G NR-n2	DFT-S_15KHz QPSK20M	Top Side	0	380000	50	25	1	Ant 0	w/o	6Cell	24.00	23.64	1.09	0.05	<0.001	0.00
	5G NR-n2	DFT-S_15KHz QPSK20M	Bottom Side	20	380000	50	25	1	Ant 0	w/o	6Cell	24.00	23.64	1.09	-0.12	0.043	0.05
	5G NR-n2	DFT-S_15KHz QPSK20M	Rear Face	0	380000	1	1	1	Ant 0	w/	6Cell	14.50	14.49	1.00	0.1	0.501	0.50
	5G NR-n2	DFT-S_15KHz QPSK20M	Bottom Side	0	380000	1	1	1	Ant 0	w/	6Cell	14.50	14.49	1.00	-0.19	0.161	0.16
	5G NR-n2	DFT-S_15KHz QPSK20M	Rear Face	0	380000	50	0	1	Ant 0	w/	6Cell	14.50	14.36	1.03	-0.07	0.577	0.59
	5G NR-n2	DFT-S_15KHz QPSK20M	Bottom Side	0	380000	50	0	1	Ant 0	w/	6Cell	14.50	14.36	1.03	-0.15	0.174	0.18
	5G NR-n2	DFT-S_15KHz QPSK20M	Rear Face	25	380000	1	1	1	Ant 1	w/o	6Cell	24.00	23.82	1.04	-0.12	0.087	0.09
	5G NR-n2	DFT-S_15KHz QPSK20M	Left Side	0	380000	1	1	1	Ant 1	w/o	6Cell	24.00	23.82	1.04	-0.13	0.065	0.07
	5G NR-n2	DFT-S_15KHz QPSK20M	Right Side	0	380000	1	1	1	Ant 1	w/o	6Cell	24.00	23.82	1.04	-0.17	0.218	0.23
	5G NR-n2	DFT-S_15KHz QPSK20M	Top Side	0	380000	1	1	1	Ant 1	w/o	6Cell	24.00	23.82	1.04	0	<0.001	0.00
	5G NR-n2	DFT-S_15KHz QPSK20M	Bottom Side	20	380000	1	1	1	Ant 1	w/o	6Cell	24.00	23.82	1.04	0.04	0.084	0.09
	5G NR-n2	DFT-S_15KHz QPSK20M	Rear Face	25	380000	50	25	1	Ant 1	w/o	6Cell	24.00	23.64	1.09	0.19	0.068	0.07
	5G NR-n2	DFT-S_15KHz QPSK20M	Left Side	0	380000	50	25	1	Ant 1	w/o	6Cell	24.00	23.64	1.09	-0.08	0.049	0.05
	5G NR-n2	DFT-S_15KHz QPSK20M	Right Side	0	380000	50	25	1	Ant 1	w/o	6Cell	24.00	23.64	1.09	0.03	0.165	0.18
	5G NR-n2	DFT-S_15KHz QPSK20M	Top Side	0	380000	50	25	1	Ant 1	w/o	6Cell	24.00	23.64	1.09	0	<0.001	0.00
	5G NR-n2	DFT-S_15KHz QPSK20M	Bottom Side	20	380000	50	25	1	Ant 1	w/o	6Cell	24.00	23.64	1.09	0.12	<0.001	0.00
	5G NR-n2	DFT-S_15KHz QPSK20M	Rear Face	0	380000	1	1	1	Ant 1	w/	6Cell	14.50	14.49	1.00	0.01	0.479	0.48
	5G NR-n2	DFT-S_15KHz QPSK20M	Bottom Side	0	380000	1	1	1	Ant 1	w/	6Cell	14.50	14.49	1.00	0.02	0.163	0.16
	5G NR-n2	DFT-S_15KHz QPSK20M	Rear Face	0	380000	50	0	1	Ant 1	w/	6Cell	14.50	14.36	1.03	-0.09	0.560	0.58
	5G NR-n2	DFT-S_15KHz QPSK20M	Bottom Side	0	380000	50	0	1	Ant 1	w/	6Cell	14.50	14.36	1.03	0.11	0.185	0.19
	5G NR-n2	DFT-S_15KHz QPSK20M	Rear Face	0	372000	50	0	1	Ant 0	w/	6Cell	14.50	14.28	1.05	-0.04	0.584	0.61
22	5G NR-n2	DFT-S_15KHz QPSK20M	Rear Face	0	376000	50	0	1	Ant 0	w/	6Cell	14.50	14.26	1.06	-0.08	0.723	0.77
	5G NR-n2	DFT-S_15KHz QPSK20M	Rear Face	0	376000	50	0	2	Ant 0	w/	6Cell	14.50	14.26	1.06	0.01	0.702	0.74
	5G NR-n2	DFT-S_15KHz QPSK20M	Rear Face	0	376000	50	0	3	Ant 0	w/	4Cell	14.50	14.26	1.06	0.05	0.683	0.72
	5G NR-n2	DFT-S_15KHz QPSK20M	Rear Face	0	376000	50	0	4	Ant 0	w/	4Cell	14.50	14.26	1.06	0.09	0.697	0.74

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

SAR Test Report

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB	offset	Sample	Ant Status	P-sensor	Battery	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (w/kg)	Scaled 1g SAR (w/kg)
	5G NR-n5	DFT-S_15KHz QPSK20M	Rear Face	25	167300	1	1	1	Ant 0	w/o	6Cell	24.00	23.78	1.05	-0.1	0.048	0.05
	5G NR-n5	DFT-S_15KHz QPSK20M	Left Side	0	167300	1	1	1	Ant 0	w/o	6Cell	24.00	23.78	1.05	-0.18	0.101	0.11
	5G NR-n5	DFT-S_15KHz QPSK20M	Right Side	0	167300	1	1	1	Ant 0	w/o	6Cell	24.00	23.78	1.05	0.19	0.071	0.07
	5G NR-n5	DFT-S_15KHz QPSK20M	Top Side	0	167300	1	1	1	Ant 0	w/o	6Cell	24.00	23.78	1.05	0	<0.001	0.00
	5G NR-n5	DFT-S_15KHz QPSK20M	Bottom Side	20	167300	1	1	1	Ant 0	w/o	6Cell	24.00	23.78	1.05	0.04	0.045	0.05
	5G NR-n5	DFT-S_15KHz QPSK20M	Rear Face	25	167300	50	25	1	Ant 0	w/o	6Cell	24.00	23.57	1.10	-0.18	0.041	0.05
	5G NR-n5	DFT-S_15KHz QPSK20M	Left Side	0	167300	50	25	1	Ant 0	w/o	6Cell	24.00	23.57	1.10	0	0.045	0.05
	5G NR-n5	DFT-S_15KHz QPSK20M	Right Side	0	167300	50	25	1	Ant 0	w/o	6Cell	24.00	23.57	1.10	-0.06	0.047	0.05
	5G NR-n5	DFT-S_15KHz QPSK20M	Top Side	0	167300	50	25	1	Ant 0	w/o	6Cell	24.00	23.57	1.10	0	<0.001	0.00
	5G NR-n5	DFT-S_15KHz QPSK20M	Bottom Side	20	167300	50	25	1	Ant 0	w/o	6Cell	24.00	23.57	1.10	0.04	0.048	0.05
	5G NR-n5	DFT-S_15KHz QPSK20M	Rear Face	0	167300	1	1	1	Ant 0	w/	6Cell	18.00	17.28	1.18	0.08	0.419	0.49
	5G NR-n5	DFT-S_15KHz QPSK20M	Bottom Side	0	167300	1	1	1	Ant 0	w/	6Cell	18.00	17.28	1.18	-0.02	0.212	0.25
	5G NR-n5	DFT-S_15KHz QPSK20M	Rear Face	0	167300	50	0	1	Ant 0	w/	6Cell	18.00	17.18	1.21	0.1	0.384	0.46
	5G NR-n5	DFT-S_15KHz QPSK20M	Bottom Side	0	167300	50	0	1	Ant 0	w/	6Cell	18.00	17.18	1.21	0.19	0.2274	0.28
	5G NR-n5	DFT-S_15KHz QPSK20M	Rear Face	0	166800	1	1	1	Ant 0	w/	6Cell	18.00	17.16	1.21	0.12	0.54	0.65
23	5G NR-n5	DFT-S_15KHz QPSK20M	Rear Face	0	167800	1	1	1	Ant 0	w/	6Cell	18.00	17.14	1.22	-0.05	0.609	0.74
	5G NR-n5	DFT-S_15KHz QPSK20M	Rear Face	0	167800	1	1	2	Ant 0	w/	6Cell	18.00	17.14	1.22	0.03	0.592	0.72
	5G NR-n5	DFT-S_15KHz QPSK20M	Rear Face	0	167800	1	1	3	Ant 0	w/	4Cell	18.00	17.14	1.22	0.1	0.565	0.69
	5G NR-n5	DFT-S_15KHz QPSK20M	Rear Face	0	167800	1	1	4	Ant 0	w/	4Cell	18.00	17.14	1.22	0.04	0.582	0.71

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

SAR Test Report

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB	offset	Sample	Ant Status	P-sensor	Battery	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (w/kg)	Scaled 1g SAR (w/kg)
	5G NR-n7	DFTs_15KHz QPSK20M	Rear Face	25	502000	1	1	1	Ant 1	w/o	6Cell	24.00	23.89	1.03	-0.19	0.098	0.10
	5G NR-n7	DFT-S_15KHz QPSK20M	Left Side	0	502000	1	1	1	Ant 1	w/o	6Cell	24.00	23.89	1.03	-0.16	0.069	0.07
	5G NR-n7	DFT-S_15KHz QPSK20M	Right Side	0	502000	1	1	1	Ant 1	w/o	6Cell	24.00	23.89	1.03	-0.11	0.231	0.24
	5G NR-n7	DFT-S_15KHz QPSK20M	Top Side	0	502000	1	1	1	Ant 1	w/o	6Cell	24.00	23.89	1.03	0	<0.001	0.00
	5G NR-n7	DFTs_15KHz QPSK20M	Bottom Side	20	502000	1	1	1	Ant 1	w/o	6Cell	24.00	23.89	1.03	0.08	0.106	0.11
	5G NR-n7	DFTs_15KHz QPSK20M	Rear Face	25	502000	50	25	1	Ant 1	w/o	6Cell	24.00	23.86	1.03	-0.19	0.081	0.08
	5G NR-n7	DFT-S_15KHz QPSK20M	Left Side	0	502000	50	25	1	Ant 1	w/o	6Cell	24.00	23.86	1.03	-0.02	0.059	0.06
	5G NR-n7	DFT-S_15KHz QPSK20M	Right Side	0	502000	50	25	1	Ant 1	w/o	6Cell	24.00	23.86	1.03	0.15	0.198	0.20
	5G NR-n7	DFT-S_15KHz QPSK20M	Top Side	0	502000	50	25	1	Ant 1	w/o	6Cell	24.00	23.86	1.03	0	<0.001	0.00
	5G NR-n7	DFTs_15KHz QPSK20M	Bottom Side	20	502000	50	25	1	Ant 1	w/o	6Cell	24.00	23.86	1.03	-0.03	0.086	0.09
24	5G NR-n7	DFTs_15KHz QPSK20M	Rear Face	0	502000	1	1	1	Ant 1	w/	6Cell	10.50	9.91	1.15	-0.04	0.413	0.47
	5G NR-n7	DFTs_15KHz QPSK20M	Bottom Side	0	502000	1	1	1	Ant 1	w/	6Cell	10.50	9.91	1.15	0.12	0.145	0.17
	5G NR-n7	DFTs_15KHz QPSK20M	Rear Face	0	502000	50	0	1	Ant 1	w/	6Cell	10.50	9.85	1.16	0.01	0.398	0.46
	5G NR-n7	DFTs_15KHz QPSK20M	Bottom Side	0	502000	50	0	1	Ant 1	w/	6Cell	10.50	9.85	1.16	0.11	0.172	0.20
	5G NR-n7	DFTs_15KHz QPSK20M	Rear Face	0	507000	1	1	1	Ant 1	w/	6Cell	10.50	9.75	1.19	0.08	0.298	0.35
	5G NR-n7	DFTs_15KHz QPSK20M	Rear Face	0	512000	1	1	1	Ant 1	w/	6Cell	10.50	9.88	1.15	0.06	0.367	0.42
	5G NR-n7	DFTs_15KHz QPSK20M	Rear Face	0	502000	1	1	2	Ant 1	w/	6Cell	10.50	9.91	1.15	-0.15	0.394	0.45
	5G NR-n7	DFTs_15KHz QPSK20M	Rear Face	0	502000	1	1	3	Ant 1	w/	4Cell	10.50	9.91	1.15	0.14	0.362	0.42
	5G NR-n7	DFTs_15KHz QPSK20M	Rear Face	0	502000	1	1	4	Ant 1	w/	4Cell	10.50	9.91	1.15	0.03	0.383	0.44

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

SAR Test Report

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB	offset	Sample	Ant Status	P-sensor	Battery	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (w/kg)	Scaled 1g SAR (w/kg)
	5G NR-n12	DFT-S_15KHz QPSK15M	Rear Face	25	141500	1	1	1	Ant 0	w/o	6Cell	24.00	23.73	1.06	-0.05	0.091	0.10
	5G NR-n12	DFT-S_15KHz QPSK15M	Left Side	0	141500	1	1	1	Ant 0	w/o	6Cell	24.00	23.73	1.06	0.02	0.027	0.03
	5G NR-n12	DFT-S_15KHz QPSK15M	Right Side	0	141500	1	1	1	Ant 0	w/o	6Cell	24.00	23.73	1.06	0	<0.001	0.00
	5G NR-n12	DFT-S_15KHz QPSK15M	Top Side	0	141500	1	1	1	Ant 0	w/o	6Cell	24.00	23.73	1.06	0	<0.001	0.00
	5G NR-n12	DFT-S_15KHz QPSK15M	Bottom Side	20	141500	1	1	1	Ant 0	w/o	6Cell	24.00	23.73	1.06	0.13	0.071	0.08
	5G NR-n12	DFT-S_15KHz QPSK15M	Rear Face	25	141500	36	18	1	Ant 0	w/o	6Cell	24.00	23.56	1.11	-0.13	0.065	0.07
	5G NR-n12	DFT-S_15KHz QPSK15M	Left Side	0	141500	36	18	1	Ant 0	w/o	6Cell	24.00	23.56	1.11	0	<0.001	0.00
	5G NR-n12	DFT-S_15KHz QPSK15M	Right Side	0	141500	36	18	1	Ant 0	w/o	6Cell	24.00	23.56	1.11	0	<0.001	0.00
	5G NR-n12	DFT-S_15KHz QPSK15M	Top Side	0	141500	36	18	1	Ant 0	w/o	6Cell	24.00	23.56	1.11	0	<0.001	0.00
	5G NR-n12	DFT-S_15KHz QPSK15M	Bottom Side	20	141500	36	18	1	Ant 0	w/o	6Cell	24.00	23.56	1.11	0.14	0.053	0.06
25	5G NR-n12	DFT-S_15KHz QPSK15M	Rear Face	0	141500	1	1	1	Ant 0	w/	6Cell	18.50	18.27	1.05	-0.05	0.659	0.69
	5G NR-n12	DFT-S_15KHz QPSK15M	Bottom Side	0	141500	1	1	1	Ant 0	w/	6Cell	18.50	18.27	1.05	-0.07	0.313	0.33
	5G NR-n12	DFT-S_15KHz QPSK15M	Rear Face	0	141500	36	0	1	Ant 0	w/	6Cell	18.50	18.12	1.09	0.14	0.499	0.54
	5G NR-n12	DFT-S_15KHz QPSK15M	Bottom Side	0	141500	36	0	1	Ant 0	w/	6Cell	18.50	18.12	1.09	0.11	0.296	0.32
	5G NR-n12	DFT-S_15KHz QPSK15M	Rear Face	0	141300	1	1	1	Ant 0	w/	6Cell	18.50	18.23	1.06	-0.04	0.571	0.61
	5G NR-n12	DFT-S_15KHz QPSK15M	Rear Face	0	141700	1	1	1	Ant 0	w/	6Cell	18.50	18.18	1.08	-0.07	0.597	0.64
	5G NR-n12	DFT-S_15KHz QPSK15M	Rear Face	0	141500	1	1	2	Ant 0	w/	6Cell	18.50	18.27	1.05	0.19	0.626	0.66
	5G NR-n12	DFT-S_15KHz QPSK15M	Rear Face	0	141500	1	1	3	Ant 0	w/	4Cell	18.50	18.27	1.05	-0.16	0.542	0.57
	5G NR-n12	DFT-S_15KHz QPSK15M	Rear Face	0	141500	1	1	4	Ant 0	w/	4Cell	18.50	18.27	1.05	0.11	0.526	0.55

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.



SAR Test Report

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB	offset	Sample	Ant Status	P-sensor	Battery	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (w/kg)	Scaled 1g SAR (w/kg)
	5G NR-n41	DFT-S_30KHz QPSK100M	Rear Face	25	509202	1	1	1	Ant 1	w/o	6Cell	24.00	23.88	1.03	0.19	0.215	0.22
	5G NR-n41	DFT-S_30KHz QPSK100M	Left Side	0	509202	1	1	1	Ant 1	w/o	6Cell	24.00	23.88	1.03	-0.08	0.154	0.16
	5G NR-n41	DFT-S_30KHz QPSK100M	Right Side	0	509202	1	1	1	Ant 1	w/o	6Cell	24.00	23.88	1.03	-0.17	0.416	0.43
	5G NR-n41	DFT-S_30KHz QPSK100M	Top Side	0	509202	1	1	1	Ant 1	w/o	6Cell	24.00	23.88	1.03	0	<0.001	0.00
	5G NR-n41	DFT-S_30KHz QPSK100M	Bottom Side	20	509202	1	1	1	Ant 1	w/o	6Cell	24.00	23.88	1.03	0.19	0.221	0.23
	5G NR-n41	DFT-S_30KHz QPSK100M	Rear Face	25	509202	135	67	1	Ant 1	w/o	6Cell	24.00	23.81	1.04	0.01	0.258	0.27
	5G NR-n41	DFT-S_30KHz QPSK100M	Left Side	0	509202	135	67	1	Ant 1	w/o	6Cell	24.00	23.81	1.04	0.11	0.186	0.19
	5G NR-n41	DFT-S_30KHz QPSK100M	Right Side	0	509202	135	67	1	Ant 1	w/o	6Cell	24.00	23.81	1.04	-0.05	0.525	0.55
	5G NR-n41	DFT-S_30KHz QPSK100M	Top Side	0	509202	135	67	1	Ant 1	w/o	6Cell	24.00	23.81	1.04	0	<0.001	0.00
	5G NR-n41	DFT-S_30KHz QPSK100M	Bottom Side	20	509202	135	67	1	Ant 1	w/o	6Cell	24.00	23.81	1.04	-0.06	0.286	0.30
	5G NR-n41	DFT-S_30KHz QPSK100M	Rear Face	0	509202	1	1	1	Ant 1	w/	6Cell	9.50	9.38	1.03	0.18	0.269	0.28
	5G NR-n41	DFT-S_30KHz QPSK100M	Bottom Side	0	509202	1	1	1	Ant 1	w/	6Cell	9.50	9.38	1.03	0.12	0.104	0.11
	5G NR-n41	DFT-S_30KHz QPSK100M	Rear Face	0	509202	135	0	1	Ant 1	w/	6Cell	9.50	9.30	1.05	0.06	0.463	0.49
	5G NR-n41	DFT-S_30KHz QPSK100M	Bottom Side	0	509202	135	0	1	Ant 1	w/	6Cell	9.50	9.30	1.05	-0.06	0.149	0.16
	5G NR-n41	DFT-S_30KHz QPSK100M	Rear Face	0	513900	135	0	1	Ant 1	w/	6Cell	9.50	9.16	1.08	-0.07	0.704	0.76
	5G NR-n41	DFT-S_30KHz QPSK100M	Rear Face	0	518598	135	0	1	Ant 1	w/	6Cell	9.50	9.06	1.11	0.03	0.628	0.70
	5G NR-n41	DFT-S_30KHz QPSK100M	Rear Face	0	523299	135	0	1	Ant 1	w/	6Cell	9.50	9.16	1.08	-0.12	0.681	0.74
26	5G NR-n41	DFT-S_30KHz QPSK100M	Rear Face	0	528000	135	0	1	Ant 1	w/	6Cell	9.50	9.18	1.08	-0.04	0.712	0.77
	5G NR-n41	DFT-S_30KHz QPSK100M	Rear Face	0	528000	135	0	2	Ant 1	w/	6Cell	9.50	9.18	1.08	-0.13	0.691	0.75
	5G NR-n41	DFT-S_30KHz QPSK100M	Rear Face	0	528000	135	0	3	Ant 1	w/	4Cell	9.50	9.18	1.08	0.1	0.637	0.69
	5G NR-n41	DFT-S_30KHz QPSK100M	Rear Face	0	528000	135	0	4	Ant 1	w/	4Cell	9.50	9.18	1.08	0.16	0.616	0.67

SAR Test Report

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB	offset	Sample	Ant Status	P-sensor	Battery	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (w/kg)	Scaled 1g SAR (w/kg)
	5G NR-n66	DFT-S_15KHz QPSK20M	Rear Face	25	354000	1	1	1	Ant 0	w/o	6Cell	24.00	23.78	1.05	-0.07	0.063	0.07
	5G NR-n66	DFT-S_15KHz QPSK20M	Left Side	0	354000	1	1	1	Ant 0	w/o	6Cell	24.00	23.78	1.05	0.17	0.16	0.17
	5G NR-n66	DFT-S_15KHz QPSK20M	Right Side	0	354000	1	1	1	Ant 0	w/o	6Cell	24.00	23.78	1.05	-0.15	0.048	0.05
	5G NR-n66	DFT-S_15KHz QPSK20M	Top Side	0	354000	1	1	1	Ant 0	w/o	6Cell	24.00	23.78	1.05	0	<0.001	0.00
	5G NR-n66	DFT-S_15KHz QPSK20M	Bottom Side	20	354000	1	1	1	Ant 0	w/o	6Cell	24.00	23.78	1.05	-0.17	0.043	0.05
	5G NR-n66	DFT-S_15KHz QPSK20M	Rear Face	25	354000	50	25	1	Ant 0	w/o	6Cell	24.00	23.55	1.11	-0.02	0.043	0.05
	5G NR-n66	DFT-S_15KHz QPSK20M	Left Side	0	354000	50	25	1	Ant 0	w/o	6Cell	24.00	23.55	1.11	-0.13	0.104	0.12
	5G NR-n66	DFT-S_15KHz QPSK20M	Right Side	0	354000	50	25	1	Ant 0	w/o	6Cell	24.00	23.55	1.11	0.08	0.031	0.03
	5G NR-n66	DFT-S_15KHz QPSK20M	Top Side	0	354000	50	25	1	Ant 0	w/o	6Cell	24.00	23.55	1.11	0	<0.001	0.00
	5G NR-n66	DFT-S_15KHz QPSK20M	Bottom Side	20	354000	50	25	1	Ant 0	w/o	6Cell	24.00	23.55	1.11	0.07	0.032	0.04
	5G NR-n66	DFT-S_15KHz QPSK20M	Rear Face	0	354000	1	1	1	Ant 0	w/	6Cell	12.50	12.27	1.05	-0.07	0.411	0.43
	5G NR-n66	DFT-S_15KHz QPSK20M	Bottom Side	0	354000	1	1	1	Ant 0	w/	6Cell	12.50	12.27	1.05	-0.06	0.075	0.08
27	5G NR-n66	DFT-S_15KHz QPSK20M	Rear Face	0	354000	50	0	1	Ant 0	w/	6Cell	12.50	12.06	1.11	-0.06	0.463	0.51
	5G NR-n66	DFT-S_15KHz QPSK20M	Bottom Side	0	354000	50	0	1	Ant 0	w/	6Cell	12.50	12.06	1.11	0.05	0.077	0.09
	5G NR-n66	DFT-S_15KHz QPSK20M	Rear Face	25	354000	1	1	1	Ant 1	w/o	6Cell	24.00	23.78	1.05	-0.01	0.073	0.08
	5G NR-n66	DFT-S_15KHz QPSK20M	Left Side	0	354000	1	1	1	Ant 1	w/o	6Cell	24.00	23.78	1.05	-0.07	0.054	0.06
	5G NR-n66	DFT-S_15KHz QPSK20M	Right Side	0	354000	1	1	1	Ant 1	w/o	6Cell	24.00	23.78	1.05	0.13	0.183	0.19
	5G NR-n66	DFT-S_15KHz QPSK20M	Top Side	0	354000	1	1	1	Ant 1	w/o	6Cell	24.00	23.78	1.05	0	<0.001	0.00
	5G NR-n66	DFT-S_15KHz QPSK20M	Bottom Side	20	354000	1	1	1	Ant 1	w/o	6Cell	24.00	23.78	1.05	0.11	0.109	0.11
	5G NR-n66	DFT-S_15KHz QPSK20M	Rear Face	25	354000	50	25	1	Ant 1	w/o	6Cell	24.00	23.55	1.11	-0.12	0.054	0.06
	5G NR-n66	DFT-S_15KHz QPSK20M	Left Side	0	354000	50	25	1	Ant 1	w/o	6Cell	24.00	23.55	1.11	-0.16	0.041	0.05
	5G NR-n66	DFT-S_15KHz QPSK20M	Right Side	0	354000	50	25	1	Ant 1	w/o	6Cell	24.00	23.55	1.11	-0.07	0.137	0.15
	5G NR-n66	DFT-S_15KHz QPSK20M	Top Side	0	354000	50	25	1	Ant 1	w/o	6Cell	24.00	23.55	1.11	0	<0.001	0.00
	5G NR-n66	DFT-S_15KHz QPSK20M	Bottom Side	20	354000	50	25	1	Ant 1	w/o	6Cell	24.00	23.55	1.11	-0.06	0.086	0.10
	5G NR-n66	DFT-S_15KHz QPSK20M	Rear Face	0	354000	1	1	1	Ant 1	w/	6Cell	12.50	12.27	1.05	0.12	0.311	0.33
	5G NR-n66	DFT-S_15KHz QPSK20M	Bottom Side	0	354000	1	1	1	Ant 1	w/	6Cell	12.50	12.27	1.05	0.05	0.165	0.17
	5G NR-n66	DFT-S_15KHz QPSK20M	Rear Face	0	354000	50	0	1	Ant 1	w/	6Cell	12.50	12.06	1.11	-0.08	0.418	0.46
	5G NR-n66	DFT-S_15KHz QPSK20M	Bottom Side	0	354000	50	0	1	Ant 1	w/	6Cell	12.50	12.06	1.11	0.08	0.253	0.28
	5G NR-n66	DFT-S_15KHz QPSK20M	Rear Face	0	344000	50	0	1	Ant 0	w/	6Cell	12.50	12.05	1.11	0.1	0.342	0.38
	5G NR-n66	DFT-S_15KHz QPSK20M	Rear Face	0	349000	50	0	1	Ant 0	w/	6Cell	12.50	12.03	1.11	0.19	0.351	0.39
	5G NR-n66	DFT-S_15KHz QPSK20M	Rear Face	0	354000	50	0	2	Ant 0	w/	6Cell	12.50	12.06	1.11	0.18	0.452	0.50
	5G NR-n66	DFT-S_15KHz QPSK20M	Rear Face	0	354000	50	0	3	Ant 0	w/	4Cell	12.50	12.06	1.11	0.03	0.414	0.46
	5G NR-n66	DFT-S_15KHz QPSK20M	Rear Face	0	354000	50	0	4	Ant 0	w/	4Cell	12.50	12.06	1.11	0.07	0.439	0.49

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.



SAR Test Report

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	Sample	Ant Status	Battery	Duty Cycle	Crest Factor	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled 1g SAR (W/kg)
	WLAN2.4G	802.11b	Rear Face	0	6	1	Ant 0	6Cell	99.90	1.00	18.00	17.99	1.00	-0.04	0.878	0.88
	WLAN2.4G	802.11b	Left Side	0	6	1	Ant 0	6Cell	99.90	1.00	18.00	17.99	1.00	0.02	0.043	0.04
	WLAN2.4G	802.11b	Right Side	0	6	1	Ant 0	6Cell	99.90	1.00	18.00	17.99	1.00	-0.14	0.041	0.04
	WLAN2.4G	802.11b	Top Side	0	6	1	Ant 0	6Cell	99.90	1.00	18.00	17.99	1.00	0.05	0.559	0.56
	WLAN2.4G	802.11b	Bottom Side	0	6	1	Ant 0	6Cell	99.90	1.00	18.00	17.99	1.00	0	<0.001	0.00
28	WLAN2.4G	802.11b	Rear Face	0	6	1	Ant 1	6Cell	99.90	1.00	19.00	18.93	1.02	-0.10	1.03	1.05
	WLAN2.4G	802.11b	Left Side	0	6	1	Ant 1	6Cell	99.90	1.00	19.00	18.93	1.02	-0.07	0.052	0.05
	WLAN2.4G	802.11b	Right Side	0	6	1	Ant 1	6Cell	99.90	1.00	19.00	18.93	1.02	-0.14	0.069	0.07
	WLAN2.4G	802.11b	Top Side	0	6	1	Ant 1	6Cell	99.90	1.00	19.00	18.93	1.02	0.05	0.543	0.55
	WLAN2.4G	802.11b	Bottom Side	0	6	1	Ant 1	6Cell	99.90	1.00	19.00	18.93	1.02	0	<0.001	0.00
	WLAN2.4G	802.11n HT40	Rear Face	0	6	1	Ant 0+1	6Cell	98.20	1.02	20.00	19.69	1.07	0.07	0.378	0.41
	WLAN2.4G	802.11n HT40	Left Side	0	6	1	Ant 0+1	6Cell	98.20	1.02	20.00	19.69	1.07	0.14	0.045	0.05
	WLAN2.4G	802.11n HT40	Right Side	0	6	1	Ant 0+1	6Cell	98.20	1.02	20.00	19.69	1.07	0.09	0.043	0.05
	WLAN2.4G	802.11n HT40	Top Side	0	6	1	Ant 0+1	6Cell	98.20	1.02	20.00	19.69	1.07	-0.03	0.201	0.22
	WLAN2.4G	802.11n HT40	Bottom Side	0	6	1	Ant 0+1	6Cell	98.20	1.02	20.00	19.69	1.07	0	<0.001	0.00
	WLAN2.4G	802.11b	Rear Face	0	1	1	Ant 0	6Cell	99.90	1.00	18.00	17.93	1.02	-0.1	0.777	0.79
	WLAN2.4G	802.11b	Rear Face	0	11	1	Ant 0	6Cell	99.90	1.00	18.00	17.89	1.03	0.06	0.756	0.78
	WLAN2.4G	802.11b	Rear Face	0	12	1	Ant 0	6Cell	99.90	1.00	18.00	17.96	1.01	-0.17	0.742	0.75
	WLAN2.4G	802.11b	Rear Face	0	13	1	Ant 0	6Cell	99.90	1.00	18.00	17.87	1.03	0.19	0.701	0.72
	WLAN2.4G	802.11b	Rear Face	0	1	1	Ant 1	6Cell	99.90	1.00	19.00	18.90	1.02	-0.1	0.912	0.93
	WLAN2.4G	802.11b	Rear Face	0	11	1	Ant 1	6Cell	99.90	1.00	19.00	18.91	1.02	0.06	0.887	0.90
	WLAN2.4G	802.11b	Rear Face	0	12	1	Ant 1	6Cell	99.90	1.00	19.00	18.92	1.02	-0.17	0.869	0.89
	WLAN2.4G	802.11b	Rear Face	0	13	1	Ant 1	6Cell	99.90	1.00	19.00	18.41	1.15	0.19	0.823	0.95
	WLAN2.4G	802.11b	Rear Face	0	6	2	Ant 1	6Cell	99.90	1.00	19.00	18.93	1.02	-0.15	0.966	0.99
	WLAN2.4G	802.11b	Rear Face	0	6	3	Ant 1	4Cell	99.90	1.00	19.00	18.93	1.02	-0.14	1	1.02
	WLAN2.4G	802.11b	Rear Face	0	6	4	Ant 1	4Cell	99.90	1.00	19.00	18.93	1.02	0.04	0.912	0.93
	WLAN2.4G	802.11b	Rear Face	0	1	2	Ant 1	6Cell	99.90	1.00	19.00	18.90	1.02	0.19	0.908	0.93
	WLAN2.4G	802.11b	Rear Face	0	11	2	Ant 1	6Cell	99.90	1.00	19.00	18.91	1.02	0.05	0.929	0.95
	WLAN2.4G	802.11b	Rear Face	0	12	2	Ant 1	6Cell	99.90	1.00	19.00	18.92	1.02	-0.03	0.912	0.93
	WLAN2.4G	802.11b	Rear Face	0	13	2	Ant 1	6Cell	99.90	1.00	19.00	18.41	1.15	0.01	0.889	1.02
	WLAN2.4G	802.11b	Rear Face	0	1	3	Ant 1	4Cell	99.90	1.00	19.00	18.90	1.02	0.07	0.905	0.92
	WLAN2.4G	802.11b	Rear Face	0	11	3	Ant 1	4Cell	99.90	1.00	19.00	18.91	1.02	0.12	0.901	0.92
	WLAN2.4G	802.11b	Rear Face	0	12	3	Ant 1	4Cell	99.90	1.00	19.00	18.92	1.02	0.05	0.886	0.90
	WLAN2.4G	802.11b	Rear Face	0	13	3	Ant 1	4Cell	99.90	1.00	19.00	18.41	1.15	0.08	0.878	1.01
	WLAN2.4G	802.11b	Rear Face	0	1	4	Ant 1	4Cell	99.90	1.00	19.00	18.90	1.02	-0.06	0.902	0.92
	WLAN2.4G	802.11b	Rear Face	0	11	4	Ant 1	4Cell	99.90	1.00	19.00	18.91	1.02	-0.02	0.898	0.92
	WLAN2.4G	802.11b	Rear Face	0	12	4	Ant 1	4Cell	99.90	1.00	19.00	18.92	1.02	0.04	0.889	0.91
	WLAN2.4G	802.11b	Rear Face	0	13	4	Ant 1	4Cell	99.90	1.00	19.00	18.41	1.15	-0.05	0.878	1.01
	WLAN2.4G	802.11b	Rear Face	0	6	1	Ant 1	6Cell	99.90	1.00	19.00	18.93	1.02	-0.03	0.991	1.01
	WLAN5.2G	802.11ac VHT80	Rear Face	0	42	1	Ant 0	6Cell	98.90	1.01	16.00	15.95	1.01	-0.02	0.532	0.54
	WLAN5.2G	802.11ac VHT80	Left Side	0	42	1	Ant 0	6Cell	98.90	1.01	16.00	15.95	1.01	0.13	0.074	0.08
	WLAN5.2G	802.11ac VHT80	Right Side	0	42	1	Ant 0	6Cell	98.90	1.01	16.00	15.95	1.01	0	<0.001	0.00
	WLAN5.2G	802.11ac VHT80	Top Side	0	42	1	Ant 0	6Cell	98.90	1.01	16.00	15.95	1.01	-0.02	0.871	0.89
	WLAN5.2G	802.11ac VHT80	Bottom Side	0	42	1	Ant 0	6Cell	98.90	1.01	16.00	15.95	1.01	0	<0.001	0.00
	WLAN5.2G	802.11ac VHT80	Rear Face	0	42	1	Ant 1	6Cell	97.60	1.02	14.50	14.44	1.01	-0.05	0.398	0.41
	WLAN5.2G	802.11ac VHT80	Left Side	0	42	1	Ant 1	6Cell	97.60	1.02	14.50	14.44	1.01	0	<0.001	0.00
	WLAN5.2G	802.11ac VHT80	Right Side	0	42	1	Ant 1	6Cell	97.60	1.02	14.50	14.44	1.01	0.03	0.122	0.13
	WLAN5.2G	802.11ac VHT80	Top Side	0	42	1	Ant 1	6Cell	97.60	1.02	14.50	14.44	1.01	0.08	0.769	0.79
	WLAN5.2G	802.11ac VHT80	Bottom Side	0	42	1	Ant 1	6Cell	97.60	1.02	14.50	14.44	1.01	0	<0.001	0.00
	WLAN5.2G	802.11ac VHT80	Rear Face	0	42	1	Ant 0+1	6Cell	97.80	1.02	19.00	18.98	1.00	-0.12	0.595	0.61
	WLAN5.2G	802.11ac VHT80	Left Side	0	42	1	Ant 0+1	6Cell	97.80	1.02	19.00	18.98	1.00	0.05	0.057	0.06
	WLAN5.2G	802.11ac VHT80	Right Side	0	42	1	Ant 0+1	6Cell	97.80	1.02	19.00	18.98	1.00	0.03	0.139	0.14
	WLAN5.2G	802.11ac VHT80	Top Side	0	42	1	Ant 0+1	6Cell	97.80	1.02	19.00	18.98	1.00	-0.06	0.884	0.90
	WLAN5.2G	802.11ac VHT80	Bottom Side	0	42	1	Ant 0+1	6Cell	97.80	1.02	19.00	18.98	1.00	0	<0.001	0.00
29	WLAN5.2G	802.11ac VHT80	Top Side	0	42	2	Ant 0+1	6Cell	97.80	1.02	19.00	18.98	1.00	0.09	1.16	1.18
	WLAN5.2G	802.11ac VHT80	Top Side	0	42	3	Ant 0+1	4Cell	97.80	1.02	19.00	18.98	1.00	-0.14	0.868	0.89
	WLAN5.2G	802.11ac VHT80	Top Side	0	42	4	Ant 0+1	4Cell	97.80	1.02	19.00	18.98	1.00	0.05	1.08	1.10
	WLAN5.2G	802.11ac VHT80	Top Side	0	42	2	Ant 0+1	6Cell	97.80	1.02	19.00	18.98	1.00	-0.01	1.11	1.13

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

SAR Test Report

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	Sample	Ant Status	Battery	Duty Cycle	Crest Factor	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled 1g SAR (W/kg)
	WLAN5.6G	802.11ac VHT160	Rear Face	0	114	1	Ant 0	6Cell	98.70	1.01	13.00	12.99	1.00	-0.08	0.342	0.35
	WLAN5.6G	802.11ac VHT160	Left Side	0	114	1	Ant 0	6Cell	98.70	1.01	13.00	12.99	1.00	0	<0.001	0.00
	WLAN5.6G	802.11ac VHT160	Right Side	0	114	1	Ant 0	6Cell	98.70	1.01	13.00	12.99	1.00	0	<0.001	0.00
	WLAN5.6G	802.11ac VHT160	Top Side	0	114	1	Ant 0	6Cell	98.70	1.01	13.00	12.99	1.00	0.05	0.599	0.60
	WLAN5.6G	802.11ac VHT160	Bottom Side	0	114	1	Ant 0	6Cell	98.70	1.01	13.00	12.99	1.00	0	<0.001	0.00
	WLAN5.6G	802.11ac VHT160	Rear Face	0	114	1	Ant 1	6Cell	98.80	1.01	13.50	13.50	1.00	-0.05	0.519	0.52
	WLAN5.6G	802.11ac VHT160	Left Side	0	114	1	Ant 1	6Cell	98.80	1.01	13.50	13.5	1.00	0	<0.001	0.00
	WLAN5.6G	802.11ac VHT160	Right Side	0	114	1	Ant 1	6Cell	98.80	1.01	13.50	13.5	1.00	0.03	0.075	0.08
30	WLAN5.6G	802.11ac VHT160	Top Side	0	114	1	Ant 1	6Cell	98.80	1.01	13.50	13.50	1.00	-0.02	1.06	1.07
	WLAN5.6G	802.11ac VHT160	Bottom Side	0	114	1	Ant 1	6Cell	98.80	1.01	13.50	13.5	1.00	0	<0.001	0.00
	WLAN5.6G	802.11ac VHT160	Rear Face	0	114	1	Ant 0+1	6Cell	97.80	1.02	16.50	16.44	1.01	-0.02	0.632	0.65
	WLAN5.6G	802.11ac VHT160	Left Side	0	114	1	Ant 0+1	6Cell	97.80	1.02	16.50	16.44	1.01	0.05	0.089	0.09
	WLAN5.6G	802.11ac VHT160	Right Side	0	114	1	Ant 0+1	6Cell	97.80	1.02	16.50	16.44	1.01	-0.07	0.087	0.09
	WLAN5.6G	802.11ac VHT160	Top Side	0	114	1	Ant 0+1	6Cell	97.80	1.02	16.50	16.44	1.01	0.06	0.947	0.98
	WLAN5.6G	802.11ac VHT160	Bottom Side	0	114	1	Ant 0+1	6Cell	97.80	1.02	16.50	16.44	1.01	0	<0.001	0.00
	WLAN5.6G	802.11ac VHT160	Top Side	0	114	2	Ant 1	6Cell	98.80	1.01	13.50	13.50	1.00	-0.03	0.957	0.97
	WLAN5.6G	802.11ac VHT160	Top Side	0	114	3	Ant 1	4Cell	98.80	1.01	13.50	13.50	1.00	0.05	1.01	1.02
	WLAN5.6G	802.11ac VHT160	Top Side	0	114	4	Ant 1	4Cell	98.80	1.01	13.50	13.50	1.00	0.08	0.925	0.93
	WLAN5.6G	802.11ac VHT160	Top Side	0	114	1	Ant 1	6Cell	98.80	1.01	13.50	13.50	1.00	0.09	1.02	1.03
	WLAN5.8G	802.11ac VHT80	Rear Face	0	155	1	Ant 0	6Cell	98.90	1.01	13.50	13.42	1.02	-0.07	0.551	0.57
	WLAN5.8G	802.11ac VHT80	Left Side	0	155	1	Ant 0	6Cell	98.90	1.01	13.50	13.42	1.02	0	<0.001	0.00
	WLAN5.8G	802.11ac VHT80	Right Side	0	155	1	Ant 0	6Cell	98.90	1.01	13.50	13.42	1.02	0	<0.001	0.00
	WLAN5.8G	802.11ac VHT80	Top Side	0	155	1	Ant 0	6Cell	98.90	1.01	13.50	13.42	1.02	-0.02	0.757	0.78
	WLAN5.8G	802.11ac VHT80	Bottom Side	0	155	1	Ant 0	6Cell	98.90	1.01	13.50	13.42	1.02	0	<0.001	0.00
	WLAN5.8G	802.11ac VHT80	Rear Face	0	155	1	Ant 1	6Cell	97.60	1.02	14.00	13.99	1.00	-0.03	0.537	0.55
	WLAN5.8G	802.11ac VHT80	Left Side	0	155	1	Ant 1	6Cell	97.60	1.02	14.00	13.99	1	0	<0.001	0.00
	WLAN5.8G	802.11ac VHT80	Right Side	0	155	1	Ant 1	6Cell	97.60	1.02	14.00	13.99	1	0.012	0.089	0.09
	WLAN5.8G	802.11ac VHT80	Top Side	0	155	1	Ant 1	6Cell	97.60	1.02	14.00	13.99	1.00	0.08	1.06	1.08
	WLAN5.8G	802.11ac VHT80	Bottom Side	0	155	1	Ant 1	6Cell	97.60	1.02	14.00	13.99	1	0	<0.001	0.00
	WLAN5.8G	802.11ac VHT80	Rear Face	0	155	1	Ant 0+1	6Cell	97.80	1.02	17.00	16.91	1.02	-0.16	0.804	0.84
	WLAN5.8G	802.11ac VHT80	Left Side	0	155	1	Ant 0+1	6Cell	97.80	1.02	17.00	16.91	1.02	-0.10	0.051	0.05
	WLAN5.8G	802.11ac VHT80	Right Side	0	155	1	Ant 0+1	6Cell	97.80	1.02	17.00	16.91	1.02	-0.19	0.061	0.06
	WLAN5.8G	802.11ac VHT80	Top Side	0	155	1	Ant 0+1	6Cell	97.80	1.02	17.00	16.91	1.02	0.02	1.02	1.06
	WLAN5.8G	802.11ac VHT80	Bottom Side	0	155	1	Ant 0+1	6Cell	97.80	1.02	17.00	16.91	1.02	0	<0.001	0.00
31	WLAN5.8G	802.11ac VHT80	Top Side	0	155	2	Ant 1	6Cell	97.60	1.02	14.00	13.99	1.00	0.02	1.17	1.19
	WLAN5.8G	802.11ac VHT80	Top Side	0	155	3	Ant 1	4Cell	97.60	1.02	14.00	13.99	1.00	-0.05	1.01	1.03
	WLAN5.8G	802.11ac VHT80	Top Side	0	155	4	Ant 1	4Cell	97.60	1.02	14.00	13.99	1.00	0.02	1.13	1.15
	WLAN5.8G	802.11ac VHT80	Top Side	0	155	2	Ant 1	6Cell	97.60	1.02	14.00	13.99	1.00	-0.08	1.08	1.10
	BT	BDR	Rear Face	0	78	1	Ant 1	6Cell	77.06	1.30	10.50	10.37	1.03	-0.08	0.061	0.08
	BT	BDR	Left Side	0	78	1	Ant 1	6Cell	77.06	1.30	10.50	10.37	1.03	0	<0.001	0.00
	BT	BDR	Right Side	0	78	1	Ant 1	6Cell	77.06	1.30	10.50	10.37	1.03	0	<0.001	0.00
	BT	BDR	Top Side	0	78	1	Ant 1	6Cell	77.06	1.30	10.50	10.37	1.03	0.03	0.045	0.06
	BT	BDR	Bottom Side	0	78	1	Ant 1	6Cell	77.06	1.30	10.50	10.37	1.03	0	<0.001	0.00
32	BT	BDR	Rear Face	0	0	1	Ant 1	6Cell	77.06	1.30	10.50	8.91	1.44	-0.05	0.136	0.25
	BT	BDR	Rear Face	0	39	1	Ant 1	6Cell	77.06	1.30	10.50	9.34	1.31	0.01	0.087	0.15
	BT	BDR	Rear Face	0	0	2	Ant 1	6Cell	77.06	1.30	10.50	8.91	1.44	-0.07	0.123	0.23
	BT	BDR	Rear Face	0	0	3	Ant 1	4Cell	77.06	1.30	10.50	8.91	1.44	-0.12	0.126	0.24
	BT	BDR	Rear Face	0	0	4	Ant 1	4Cell	77.06	1.30	10.50	8.91	1.44	0.05	0.105	0.20

Note: The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

SAR Test Report

Laptop Mode

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	Sample	Ant Status	P-sensor	Battery	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (w/kg)	Scaled 1g SAR (w/kg)
33	WCDMA II	RMC12.2K	Bottom	0	9538	1	Ant 0	w/	6Cell	18.50	18.25	1.06	0.11	0.744	0.79
	WCDMA II	RMC12.2K	Bottom	0	9262	1	Ant 0	w/	6Cell	18.50	17.88	1.15	-0.07	0.778	0.89
	WCDMA II	RMC12.2K	Bottom	0	9400	1	Ant 0	w/	6Cell	18.50	18.08	1.10	0.05	0.761	0.84
	WCDMA II	RMC12.2K	Bottom	0	9262	2	Ant 0	w/	6Cell	18.50	17.88	1.15	0.06	0.627	0.72
	WCDMA II	RMC12.2K	Bottom	0	9262	3	Ant 0	w/	4Cell	18.50	17.88	1.15	-0.09	0.652	0.75
	WCDMA II	RMC12.2K	Bottom	0	9262	4	Ant 0	w/	4Cell	18.50	17.88	1.15	0.12	0.619	0.71
34	WCDMA IV	RMC12.2K	Bottom	0	1413	1	Ant 0	w/	6Cell	19.50	19.17	1.08	0.01	0.835	0.90
	WCDMA IV	RMC12.2K	Bottom	0	1312	1	Ant 0	w/	6Cell	19.50	19.12	1.09	0.02	0.774	0.84
	WCDMA IV	RMC12.2K	Bottom	0	1513	1	Ant 0	w/	6Cell	19.50	19.16	1.08	-0.03	0.888	0.96
	WCDMA IV	RMC12.2K	Bottom	0	1513	2	Ant 0	w/	6Cell	19.50	19.16	1.08	0.15	0.792	0.86
	WCDMA IV	RMC12.2K	Bottom	0	1513	3	Ant 0	w/	4Cell	19.50	19.16	1.08	0.05	0.809	0.87
	WCDMA IV	RMC12.2K	Bottom	0	1513	4	Ant 0	w/	4Cell	19.50	19.16	1.08	0.09	0.783	0.85
	WCDMA IV	RMC12.2K	Bottom	0	1312	2	Ant 0	w/	6Cell	19.50	19.12	1.09	0.02	0.716	0.78
	WCDMA IV	RMC12.2K	Bottom	0	1413	2	Ant 0	w/	6Cell	19.50	19.17	1.08	0.01	0.775	0.84
	WCDMA IV	RMC12.2K	Bottom	0	1312	3	Ant 0	w/	4Cell	19.50	19.12	1.09	0.02	0.712	0.78
	WCDMA IV	RMC12.2K	Bottom	0	1413	3	Ant 0	w/	4Cell	19.50	19.17	1.08	0.01	0.772	0.83
	WCDMA IV	RMC12.2K	Bottom	0	1312	4	Ant 0	w/	4Cell	19.50	19.12	1.09	0.02	0.714	0.78
	WCDMA IV	RMC12.2K	Bottom	0	1413	4	Ant 0	w/	4Cell	19.50	19.17	1.08	0.01	0.773	0.83
	WCDMA IV	RMC12.2K	Bottom	0	1513	1	Ant 0	w/	6Cell	19.50	19.16	1.08	-0.12	0.852	0.92
35	WCDMA V	RMC12.2K	Bottom	0	4132	1	Ant 0	w/	6Cell	22.00	21.91	1.02	0.02	0.793	0.81
	WCDMA V	RMC12.2K	Bottom	0	4182	1	Ant 0	w/	6Cell	22.00	21.78	1.05	0.15	0.836	0.88
	WCDMA V	RMC12.2K	Bottom	0	4233	1	Ant 0	w/	6Cell	22.00	21.52	1.12	-0.04	0.907	1.02
	WCDMA V	RMC12.2K	Bottom	0	4233	2	Ant 0	w/	6Cell	22.00	21.52	1.12	0.12	0.833	0.93
	WCDMA V	RMC12.2K	Bottom	0	4233	3	Ant 0	w/	4Cell	22.00	21.52	1.12	0.05	0.865	0.97
	WCDMA V	RMC12.2K	Bottom	0	4233	4	Ant 0	w/	4Cell	22.00	21.52	1.12	0.09	0.817	0.92
	WCDMA V	RMC12.2K	Bottom	0	4132	2	Ant 0	w/	6Cell	22.00	21.91	1.02	0.02	0.794	0.81
	WCDMA V	RMC12.2K	Bottom	0	4182	2	Ant 0	w/	6Cell	22.00	21.78	1.05	0.15	0.836	0.88
	WCDMA V	RMC12.2K	Bottom	0	4132	3	Ant 0	w/	4Cell	22.00	21.91	1.02	0.02	0.794	0.81
	WCDMA V	RMC12.2K	Bottom	0	4182	3	Ant 0	w/	4Cell	22.00	21.78	1.05	0.15	0.836	0.88
	WCDMA V	RMC12.2K	Bottom	0	4132	4	Ant 0	w/	4Cell	22.00	21.91	1.02	0.02	0.793	0.81
	WCDMA V	RMC12.2K	Bottom	0	4182	4	Ant 0	w/	4Cell	22.00	21.78	1.05	0.15	0.836	0.88
	WCDMA V	RMC12.2K	Bottom	0	4233	1	Ant 0	w/	6Cell	22.00	21.52	1.12	0.01	0.888	0.99

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB	offset	Sample	Ant Status	P-sensor	Battery	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (w/kg)	Scaled 1g SAR (w/kg)
36	LTE 2	QPSK20M	Bottom	0	18900	1	0	1	Ant 0	w/	6Cell	17.00	17.00	1.00	0.11	0.642	0.64
	LTE 2	QPSK20M	Bottom	0	18900	50	0	1	Ant 0	w/	6Cell	17.00	16.97	1.01	0.15	0.634	0.64
	LTE 2	QPSK20M	Bottom	0	18700	1	0	1	Ant 0	w/	6Cell	17.00	16.90	1.02	-0.09	0.636	0.65
	LTE 2	QPSK20M	Bottom	0	19100	1	0	1	Ant 0	w/	6Cell	17.00	16.98	1.00	-0.01	0.660	0.66
	LTE 2	QPSK20M	Bottom	0	18900	1	0	1	Ant 1	w/	6Cell	17.00	17.00	1.00	0.12	0.546	0.55
	LTE 2	QPSK20M	Bottom	0	18900	50	0	1	Ant 1	w/	6Cell	17.00	16.97	1.01	0.15	0.525	0.53
	LTE 2	QPSK20M	Bottom	0	18700	1	0	1	Ant 1	w/	6Cell	17.00	16.90	1.02	0.08	0.609	0.62
	LTE 2	QPSK20M	Bottom	0	19100	1	0	1	Ant 1	w/	6Cell	17.00	16.98	1.00	0.18	0.439	0.44
	LTE 2	QPSK20M	Bottom	0	19100	1	0	2	Ant 0	w/	6Cell	17.00	16.98	1.00	-0.08	0.602	0.60
	LTE 2	QPSK20M	Bottom	0	19100	1	0	3	Ant 0	w/	4Cell	17.00	16.98	1.00	0.06	0.636	0.64
	LTE 2	QPSK20M	Bottom	0	19100	1	0	4	Ant 0	w/	4Cell	17.00	16.98	1.00	-0.03	0.592	0.59
	LTE 4	QPSK20M	Bottom	0	20050	1	0	1	Ant 0	w/	6Cell	18.00	18.00	1.00	0.11	0.621	0.62
37	LTE 4	QPSK20M	Bottom	0	20050	50	0	1	Ant 0	w/	6Cell	18.00	17.96	1.01	-0.05	0.573	0.58
	LTE 4	QPSK20M	Bottom	0	20175	1	0	1	Ant 0	w/	6Cell	18.00	17.94	1.01	0.03	0.618	0.62
	LTE 4	QPSK20M	Bottom	0	20300	1	0	1	Ant 0	w/	6Cell	18.00	17.90	1.02	0.01	0.651	0.66
	LTE 4	QPSK20M	Bottom	0	20300	1	0	2	Ant 0	w/	6Cell	18.00	17.90	1.02	0.14	0.602	0.61
	LTE 4	QPSK20M	Bottom	0	20300	1	0	3	Ant 0	w/	4Cell	18.00	17.90	1.02	-0.06	0.641	0.65
	LTE 4	QPSK20M	Bottom	0	20300	1	0	4	Ant 0	w/	4Cell	18.00	17.90	1.02	0.02	0.592	0.60
	LTE 5	QPSK10M	Bottom	0	20450	1	0	1	Ant 0	w/	6Cell	19.50	19.50	1.00	0.11	0.561	0.56
	LTE 5	QPSK10M	Bottom	0	20450	25	0	1	Ant 0	w/	6Cell	19.50	19.45	1.01	-0.06	0.551	0.56
38	LTE 5	QPSK10M	Bottom	0	20525	1	0	1	Ant 0	w/	6Cell	19.50	19.45	1.01	0.07	0.568	0.57
	LTE 5	QPSK10M	Bottom	0	20600	1	0	1	Ant 0	w/	6Cell	19.50	19.41	1.02	-0.03	0.577	0.59
	LTE 5	QPSK10M	Bottom	0	20600	1	0	2	Ant 0	w/	6Cell	19.50	19.41	1.02	0.15	0.551	0.56
	LTE 5	QPSK10M	Bottom	0	20600	1	0	3	Ant 0	w/	4Cell	19.50	19.41	1.02	-0.07	0.568	0.58
	LTE 5	QPSK10M	Bottom	0	20600	1	0	4	Ant 0	w/	4Cell	19.50	19.41	1.02	0.03	0.543	0.55
	LTE 5	QPSK10M	Bottom	0	PCC:20450 SCC:20549	PCC:1 SCC:1	PCC:49 SCC:0	1	Ant 0	w/	6Cell	19.50	19.37	1.03	0.02	0.498	0.51
39	LTE 7	QPSK20M	Bottom	0	21350	1	0	1	Ant 0	w/	6Cell	16.00	16.00	1.00	-0.08	0.613	0.61
	LTE 7	QPSK20M	Bottom	0	21350	50	0	1	Ant 0	w/	6Cell	16.00	15.97	1.01	0.02	0.601	0.61
	LTE 7	QPSK20M	Bottom	0	20850	1	0	1	Ant 0	w/	6Cell	16.00	15.77	1.05	0.14	0.569	0.60
	LTE 7	QPSK20M	Bottom	0	21100	1	0	1	Ant 0	w/	6Cell	16.00	15.89	1.03	0.17	0.577	0.59
	LTE 7	QPSK20M	Bottom	0	21350	1	0	1	Ant 1	w/	6Cell	16.00	16.00	1.00	0.1	0.534	0.53
	LTE 7	QPSK20M	Bottom	0	21350	50	0	1	Ant 1	w/	6Cell	16.00	15.97	1.01	0.03	0.587	0.59
	LTE 7	QPSK20M	Bottom	0	20850	1	0	1	Ant 1	w/	6Cell	16.00	15.77	1.05	0.03	0.585	0.61
	LTE 7	QPSK20M	Bottom	0	21100	1	0	1	Ant 1	w/	6Cell	16.00	15.89	1.03	0.09	0.591	0.61
	LTE 7	QPSK20M	Bottom	0	21350	1	0	2	Ant 0	w/	6Cell	16.00	16.00	1.00	0.01	0.583	0.58
	LTE 7	QPSK20M	Bottom	0	21350	1	0	3	Ant 0	w/	4Cell	16.00	16.00	1.00	0.02	0.603	0.60
	LTE 7	QPSK20M	Bottom	0	21350	1	0	4	Ant 0	w/	4Cell	16.00	16.00	1.00	0.08	0.574	0.57
	LTE 7	QPSK20M	Bottom	0	PCC:21152 SCC:21350	PCC:1 SCC:1	PCC:99 SCC:0	1	Ant 0	w/	6Cell	16.00	15.93	1.02	-0.09	0.526	0.54

SAR Test Report

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB	offset	Sample	Ant Status	P-sensor	Battery	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (w/kg)	Scaled 1g SAR (w/kg)
40	LTE 12	QPSK10M	Bottom	0	23130	1	0	1	Ant 0	w/	6Cell	20.00	19.90	1.02	-0.01	0.695	0.71
	LTE 12	QPSK10M	Bottom	0	23130	25	0	1	Ant 0	w/	6Cell	20.00	19.79	1.05	0.06	0.673	0.71
	LTE 12	QPSK10M	Bottom	0	23060	1	0	1	Ant 0	w/	6Cell	20.00	19.81	1.04	-0.14	0.694	0.72
	LTE 12	QPSK10M	Bottom	0	23095	1	0	1	Ant 0	w/	6Cell	20.00	19.87	1.03	-0.11	0.706	0.73
	LTE 12	QPSK10M	Bottom	0	23095	1	0	2	Ant 0	w/	6Cell	20.00	19.87	1.03	0.1	0.673	0.69
	LTE 12	QPSK10M	Bottom	0	23095	1	0	3	Ant 0	w/	4Cell	20.00	19.87	1.03	-0.01	0.696	0.72
41	LTE 12	QPSK10M	Bottom	0	23095	1	0	4	Ant 0	w/	4Cell	20.00	19.87	1.03	0.11	0.661	0.68
	LTE 13	QPSK10M	Bottom	0	23230	1	0	1	Ant 0	w/	6Cell	20.00	19.99	1.00	-0.15	0.570	0.57
	LTE 13	QPSK10M	Bottom	0	23230	25	0	1	Ant 0	w/	6Cell	20.00	19.76	1.06	0.11	0.539	0.57
	LTE 13	QPSK10M	Bottom	0	23230	1	0	2	Ant 0	w/	6Cell	20.00	19.99	1.00	0.12	0.541	0.54
	LTE 13	QPSK10M	Bottom	0	23230	1	0	3	Ant 0	w/	4Cell	20.00	19.99	1.00	0.05	0.559	0.56
	LTE 13	QPSK10M	Bottom	0	23230	1	0	4	Ant 0	w/	4Cell	20.00	19.99	1.00	-0.08	0.531	0.53
42	LTE 14	QPSK10M	Bottom	0	23330	1	0	1	Ant 0	w/	6Cell	22.00	22.00	1.00	-0.08	0.656	0.66
	LTE 14	QPSK10M	Bottom	0	23330	25	0	1	Ant 0	w/	6Cell	22.00	21.94	1.01	0.17	0.642	0.65
	LTE 14	QPSK10M	Bottom	0	23330	1	0	2	Ant 0	w/	6Cell	22.00	22.00	1.00	0.12	0.628	0.63
	LTE 14	QPSK10M	Bottom	0	23330	1	0	3	Ant 0	w/	4Cell	22.00	22.00	1.00	-0.12	0.643	0.64
	LTE 14	QPSK10M	Bottom	0	23330	1	0	4	Ant 0	w/	4Cell	22.00	22.00	1.00	-0.03	0.622	0.62
	LTE 17	QPSK10M	Bottom	0	23790	1	0	1	Ant 0	w/	6Cell	21.50	21.50	1.00	-0.16	0.569	0.57
43	LTE 17	QPSK10M	Bottom	0	23790	25	0	1	Ant 0	w/	6Cell	21.50	21.39	1.03	-0.14	0.542	0.56
	LTE 17	QPSK10M	Bottom	0	23780	1	0	1	Ant 0	w/	6Cell	21.50	21.41	1.02	0.03	0.563	0.57
	LTE 17	QPSK10M	Bottom	0	23800	1	0	1	Ant 0	w/	6Cell	21.50	21.45	1.01	0.08	0.542	0.55
	LTE 17	QPSK10M	Bottom	0	23790	1	0	2	Ant 0	w/	6Cell	21.50	21.50	1.00	-0.08	0.526	0.53
	LTE 17	QPSK10M	Bottom	0	23790	1	0	3	Ant 0	w/	4Cell	21.50	21.50	1.00	0.09	0.542	0.54
	LTE 17	QPSK10M	Bottom	0	23790	1	0	4	Ant 0	w/	4Cell	21.50	21.50	1.00	0.14	0.521	0.52
44	LTE 25	QPSK20M	Bottom	0	26590	1	0	1	Ant 0	w/	6Cell	17.00	17.00	1.00	0.03	0.537	0.54
	LTE 25	QPSK20M	Bottom	0	26590	50	0	1	Ant 0	w/	6Cell	17.00	16.93	1.02	-0.03	0.523	0.53
	LTE 25	QPSK20M	Bottom	0	26140	1	0	1	Ant 0	w/	6Cell	17.00	16.95	1.01	-0.06	0.467	0.47
	LTE 25	QPSK20M	Bottom	0	26365	1	0	1	Ant 0	w/	6Cell	17.00	16.98	1.00	-0.18	0.486	0.49
	LTE 25	QPSK20M	Bottom	0	26590	1	0	2	Ant 0	w/	6Cell	17.00	17.00	1.00	0.13	0.504	0.50
	LTE 25	QPSK20M	Bottom	0	26590	1	0	3	Ant 0	w/	4Cell	17.00	17.00	1.00	-0.11	0.526	0.53
45	LTE 25	QPSK20M	Bottom	0	26590	1	0	4	Ant 0	w/	4Cell	17.00	17.00	1.00	-0.04	0.494	0.49
	LTE 26	QPSK15M	Bottom	0	26765	1	0	1	Ant 0	w/	6Cell	20.50	20.32	1.04	-0.18	0.621	0.65
	LTE 26	QPSK15M	Bottom	0	26765	36	0	1	Ant 0	w/	6Cell	20.50	20.30	1.05	-0.01	0.604	0.63
	LTE 26	QPSK15M	Bottom	0	26865	1	0	1	Ant 0	w/	6Cell	20.50	20.10	1.10	0.13	0.614	0.68
	LTE 26	QPSK15M	Bottom	0	26965	1	0	1	Ant 0	w/	6Cell	20.50	20.13	1.09	-0.13	0.661	0.72
	LTE 26	QPSK15M	Bottom	0	26965	1	0	2	Ant 0	w/	6Cell	20.50	20.13	1.09	-0.18	0.626	0.68
46	LTE 26	QPSK15M	Bottom	0	26965	1	0	3	Ant 0	w/	4Cell	20.50	20.13	1.09	-0.09	0.654	0.71
	LTE 26	QPSK15M	Bottom	0	26965	1	0	4	Ant 0	w/	4Cell	20.50	20.13	1.09	0.19	0.615	0.67
	LTE 30	QPSK10M	Bottom	0	27710	1	0	1	Ant 0	w/	6Cell	18.50	18.50	1.00	0.09	0.661	0.66
	LTE 30	QPSK10M	Bottom	0	27710	25	0	1	Ant 0	w/	6Cell	18.50	18.44	1.01	0.11	0.638	0.64
	LTE 30	QPSK10M	Bottom	0	27710	1	0	2	Ant 0	w/	6Cell	18.50	18.50	1.00	0.03	0.566	0.57
	LTE 30	QPSK10M	Bottom	0	27710	1	0	3	Ant 0	w/	4Cell	18.50	18.50	1.00	-0.08	0.627	0.63
47	LTE 30	QPSK10M	Bottom	0	27710	1	0	4	Ant 0	w/	4Cell	18.50	18.50	1.00	0.04	0.547	0.55
	LTE 38	QPSK20M	Bottom	0	38150	1	0	1	Ant 0	w/	6Cell	19.00	19.00	1.00	0.02	0.744	0.74
	LTE 38	QPSK20M	Bottom	0	38150	50	0	1	Ant 0	w/	6Cell	19.00	18.89	1.03	0.03	0.752	0.77
	LTE 38	QPSK20M	Bottom	0	37850	1	0	1	Ant 0	w/	6Cell	19.00	18.91	1.02	-0.07	0.763	0.78
	LTE 38	QPSK20M	Bottom	0	38000	1	0	1	Ant 0	w/	6Cell	19.00	18.97	1.01	-0.01	0.781	0.79
	LTE 38	QPSK20M	Bottom	0	38000	1	0	2	Ant 0	w/	6Cell	19.00	18.97	1.01	0.14	0.761	0.77
48	LTE 38	QPSK20M	Bottom	0	38000	1	0	3	Ant 0	w/	4Cell	19.00	18.97	1.01	0.15	0.774	0.78
	LTE 38	QPSK20M	Bottom	0	38000	1	0	4	Ant 0	w/	4Cell	19.00	18.97	1.01	0.12	0.756	0.76
	LTE 38	QPSK20M	Bottom	0	PCC:37952 SCC:38150	PCC:1 SCC:1	PCC:99 SCC:0	1	Ant 0	w/	6Cell	19.00	18.89	1.03	-0.09	0.715	0.74
	LTE 41	QPSK20M	Bottom	0	40620	1	0	1	Ant 0	w/	6Cell	19.50	19.50	1.00	-0.11	0.535	0.54
	LTE 41	QPSK20M	Bottom	0	40620	50	0	1	Ant 0	w/	6Cell	19.50	19.40	1.02	-0.14	0.518	0.53
	LTE 41	QPSK20M	Bottom	0	39790	1	0	1	Ant 0	w/	6Cell	19.50	18.85	1.16	-0.05	0.465	0.54
49	LTE 41	QPSK20M	Bottom	0	40185	1	0	1	Ant 0	w/	6Cell	19.50	19.00	1.12	0.09	0.469	0.53
	LTE 41	QPSK20M	Bottom	0	41055	1	0	1	Ant 0	w/	6Cell	19.50	19.48	1.00	0.16	0.497	0.50
	LTE 41	QPSK20M	Bottom	0	41490	1	0	1	Ant 0	w/	6Cell	19.50	19.33	1.04	-0.17	0.457	0.48
	LTE 41	QPSK20M	Bottom	0	40620	1	0	2	Ant 0	w/	6Cell	19.50	19.50	1.00	0.19	0.502	0.50
	LTE 41	QPSK20M	Bottom	0	40620	1	0	3	Ant 0	w/	4Cell	19.50	19.50	1.00	0.14	0.522	0.52
	LTE 41	QPSK20M	Bottom	0	40620	1	0	4	Ant 0	w/	4Cell	19.50	19.50	1.00	-0.1	0.494	0.49
50	LTE 41	QPSK20M	Bottom	0	PCC:40529 SCC:40727	PCC:1 SCC:1	PCC:99 SCC:0	1	Ant 0	w/	6Cell	19.50	19.36	1.03	0.06	0.416	0.43



SAR Test Report

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB	offset	Sample	Ant Status	P-sensor	Battery	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (w/kg)	Scaled 1g SAR (w/kg)
50	LTE 42	QPSK20M	Bottom	0	43340	1	0	1	Ant 1	w/	6Cell	18.50	18.47	1.01	0.02	0.851	0.86
	LTE 42	QPSK20M	Bottom	0	43340	50	0	1	Ant 1	w/	6Cell	18.50	18.40	1.02	-0.03	0.817	0.83
	LTE 42	QPSK20M	Bottom	0	43190	1	0	1	Ant 1	w/	6Cell	18.50	18.44	1.01	-0.06	0.951	0.96
	LTE 42	QPSK20M	Bottom	0	43490	1	0	1	Ant 1	w/	6Cell	18.50	18.42	1.02	0.15	0.837	0.85
	LTE 42	QPSK20M	Bottom	0	43190	50	0	1	Ant 1	w/	6Cell	18.50	18.37	1.03	-0.03	0.718	0.74
	LTE 42	QPSK20M	Bottom	0	43490	50	0	1	Ant 1	w/	6Cell	18.50	18.35	1.04	0.15	0.688	0.72
	LTE 42	QPSK20M	Bottom	0	43190	1	0	2	Ant 1	w/	6Cell	18.50	18.44	1.01	0.08	0.858	0.87
	LTE 42	QPSK20M	Bottom	0	43190	1	0	3	Ant 1	w/	4Cell	18.50	18.44	1.01	0.17	0.917	0.93
	LTE 42	QPSK20M	Bottom	0	43190	1	0	4	Ant 1	w/	4Cell	18.50	18.44	1.01	0.14	0.834	0.84
	LTE 42	QPSK20M	Bottom	0	43190	1	0	2	Ant 1	w/	6Cell	18.50	18.44	1.01	0.08	0.858	0.87
	LTE 42	QPSK20M	Bottom	0	43490	1	0	2	Ant 1	w/	6Cell	18.50	18.42	1.02	0.06	0.846	0.86
	LTE 42	QPSK20M	Bottom	0	43190	1	0	3	Ant 1	w/	4Cell	18.50	18.44	1.01	0.17	0.917	0.93
	LTE 42	QPSK20M	Bottom	0	43490	1	0	3	Ant 1	w/	4Cell	18.50	18.42	1.02	0.14	0.922	0.94
	LTE 42	QPSK20M	Bottom	0	43190	1	0	4	Ant 1	w/	4Cell	18.50	18.44	1.01	0.14	0.834	0.84
	LTE 42	QPSK20M	Bottom	0	43490	1	0	4	Ant 1	w/	4Cell	18.50	18.42	1.02	-0.06	0.831	0.85
51	LTE 42	QPSK20M	Bottom	0	PCC:43490 SCC:43292	PCC:1 SCC:1	PCC:99 SCC:0	1	Ant 1	w/	6Cell	18.50	18.30	1.05	-0.08	0.706	0.74
	LTE 42	QPSK20M	Bottom	0	41690	1	0	1	Ant 1	w/	6Cell	18.50	18.44	1.01	0.15	0.941	0.95
	LTE 48	QPSK20M	Bottom	0	55340	1	0	1	Ant 1	w/	6Cell	18.00	17.88	1.03	-0.02	0.604	0.62
	LTE 48	QPSK20M	Bottom	0	55340	50	0	1	Ant 1	w/	6Cell	18.00	17.60	1.10	-0.05	0.561	0.62
	LTE 48	QPSK20M	Bottom	0	55780	1	0	1	Ant 1	w/	6Cell	18.00	17.77	1.05	-0.14	0.584	0.61
	LTE 48	QPSK20M	Bottom	0	56210	1	0	1	Ant 1	w/	6Cell	18.00	17.70	1.07	0	0.566	0.61
	LTE 48	QPSK20M	Bottom	0	56640	1	0	1	Ant 1	w/	6Cell	18.00	17.81	1.04	-0.19	0.575	0.60
	LTE 48	QPSK20M	Bottom	0	55340	1	0	2	Ant 1	w/	6Cell	18.00	17.88	1.03	0.18	0.571	0.59
	LTE 48	QPSK20M	Bottom	0	55340	1	0	3	Ant 1	w/	4Cell	18.00	17.88	1.03	-0.08	0.589	0.61
	LTE 48	QPSK20M	Bottom	0	55340	1	0	4	Ant 1	w/	4Cell	18.00	17.88	1.03	-0.15	0.558	0.57
	LTE 48	QPSK20M	Bottom	0	PCC:55340 SCC:55538	PCC:1 SCC:1	PCC:99 SCC:0	1	Ant 1	w/	6Cell	18.00	17.56	1.11	-0.03	0.541	0.60
	LTE 66	QPSK20M	Bottom	0	132072	1	0	1	Ant 0	w/	6Cell	18.00	17.96	1.01	0.19	0.58	0.59
	LTE 66	QPSK20M	Bottom	0	132072	50	0	1	Ant 0	w/	6Cell	18.00	17.90	1.02	-0.07	0.564	0.58
	LTE 66	QPSK20M	Bottom	0	132322	1	0	1	Ant 0	w/	6Cell	18.00	17.88	1.03	0.18	0.639	0.66
	LTE 66	QPSK20M	Bottom	0	132572	1	0	1	Ant 0	w/	6Cell	18.00	17.78	1.05	-0.02	0.665	0.70
52	LTE 66	QPSK20M	Bottom	0	132072	1	0	1	Ant 1	w/	6Cell	18.00	17.96	1.01	-0.14	0.527	0.53
	LTE 66	QPSK20M	Bottom	0	132072	50	0	1	Ant 1	w/	6Cell	18.00	17.90	1.02	-0.12	0.635	0.65
	LTE 66	QPSK20M	Bottom	0	132322	1	0	1	Ant 1	w/	6Cell	18.00	17.88	1.03	0.05	0.601	0.62
	LTE 66	QPSK20M	Bottom	0	132572	1	0	1	Ant 1	w/	6Cell	18.00	17.78	1.05	0.16	0.663	0.70
	LTE 66	QPSK20M	Bottom	0	132572	1	0	2	Ant 0	w/	6Cell	18.00	17.78	1.05	-0.01	0.626	0.66
	LTE 66	QPSK20M	Bottom	0	132572	1	0	3	Ant 0	w/	4Cell	18.00	17.78	1.05	0.16	0.654	0.69
	LTE 66	QPSK20M	Bottom	0	132572	1	0	4	Ant 0	w/	4Cell	18.00	17.78	1.05	0.03	0.617	0.65
	LTE 66	QPSK10M	Bottom	0	PCC:132022 SCC:132121	PCC:1 SCC:1	PCC:49 SCC:0	1	Ant 0	w/	6Cell	18.00	17.75	1.06	-0.02	0.592	0.63
	LTE 66	QPSK20M	Bottom	0	PCC:132072 SCC:132270	PCC:1 SCC:1	PCC:99 SCC:0	1	Ant 0	w/	6Cell	18.00	17.78	1.05	-0.09	0.624	0.66
	LTE 71	QPSK20M	Bottom	0	133222	1	0	1	Ant 0	w/	6Cell	20.50	20.42	1.02	0.09	0.483	0.49
	LTE 71	QPSK20M	Bottom	0	133222	50	0	1	Ant 0	w/	6Cell	20.50	20.24	1.06	-0.05	0.458	0.49
	LTE 71	QPSK20M	Bottom	0	133297	1	0	1	Ant 0	w/	6Cell	20.50	20.32	1.04	0.11	0.526	0.55
	LTE 71	QPSK20M	Bottom	0	133372	1	0	1	Ant 0	w/	6Cell	20.50	20.39	1.03	0	0.567	0.58
	LTE 71	QPSK20M	Bottom	0	133372	1	0	2	Ant 0	w/	6Cell	20.50	20.39	1.03	0.12	0.541	0.56
	LTE 71	QPSK20M	Bottom	0	133372	1	0	3	Ant 0	w/	4Cell	20.50	20.39	1.03	0.14	0.555	0.57
	LTE 71	QPSK20M	Bottom	0	133372	1	0	4	Ant 0	w/	4Cell	20.50	20.39	1.03	0.17	0.529	0.54

SAR Test Report

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB	offset	Sample	Ant Status	P-sensor	Battery	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (w/kg)	Scaled 1g SAR (w/kg)
	5G NR-n2	DFT-S_15KHz QPSK20M	Bottom	0	380000	1	1	1	Ant 0	w/	6Cell	16.50	15.88	1.15	0.16	0.612	0.70
	5G NR-n2	DFT-S_15KHz QPSK20M	Bottom	0	380000	50	0	1	Ant 0	w/	6Cell	16.50	15.77	1.18	0.08	0.587	0.69
	5G NR-n2	DFT-S_15KHz QPSK20M	Bottom	0	380000	1	1	1	Ant 1	w/	6Cell	16.50	15.88	1.15	-0.09	0.603	0.69
	5G NR-n2	DFT-S_15KHz QPSK20M	Bottom	0	380000	50	0	1	Ant 1	w/	6Cell	16.50	15.77	1.18	-0.02	0.434	0.51
54	5G NR-n2	DFT-S_15KHz QPSK20M	Bottom	0	372000	1	1	1	Ant 0	w/	6Cell	16.50	15.74	1.19	-0.03	0.614	0.73
	5G NR-n2	DFT-S_15KHz QPSK20M	Bottom	0	376000	1	1	1	Ant 0	w/	6Cell	16.50	15.61	1.23	0.15	0.451	0.55
	5G NR-n2	DFT-S_15KHz QPSK20M	Bottom	0	372000	1	1	2	Ant 0	w/	6Cell	16.50	15.74	1.19	0.01	0.557	0.66
	5G NR-n2	DFT-S_15KHz QPSK20M	Bottom	0	372000	1	1	3	Ant 0	w/	4Cell	16.50	15.74	1.19	0.14	0.554	0.66
	5G NR-n2	DFT-S_15KHz QPSK20M	Bottom	0	372000	1	1	4	Ant 0	w/	4Cell	16.50	15.74	1.19	-0.06	0.569	0.68
	5G NR-n5	DFT-S_15KHz QPSK20M	Bottom	0	167300	1	1	1	Ant 0	w/	6Cell	19.50	19.20	1.07	0.02	0.635	0.68
	5G NR-n5	DFT-S_15KHz QPSK20M	Bottom	0	167300	50	0	1	Ant 0	w/	6Cell	19.50	19.05	1.11	0.03	0.599	0.66
	5G NR-n5	DFT-S_15KHz QPSK20M	Bottom	0	166800	1	1	1	Ant 0	w/	6Cell	19.50	19.18	1.08	0.11	0.555	0.60
55	5G NR-n5	DFT-S_15KHz QPSK20M	Bottom	0	167800	1	1	1	Ant 0	w/	6Cell	19.50	19.15	1.08	-0.03	0.709	0.77
	5G NR-n5	DFT-S_15KHz QPSK20M	Bottom	0	167800	1	1	2	Ant 0	w/	6Cell	19.50	19.15	1.08	0.15	0.647	0.70
	5G NR-n5	DFT-S_15KHz QPSK20M	Bottom	0	167800	1	1	3	Ant 0	w/	4Cell	19.50	19.15	1.08	0.02	0.623	0.67
	5G NR-n5	DFT-S_15KHz QPSK20M	Bottom	0	167800	1	1	4	Ant 0	w/	4Cell	19.50	19.15	1.08	0.08	0.608	0.66
56	5G NR-n7	DFT-S_15KHz QPSK20M	Bottom	0	502000	1	1	1	Ant 1	w/	6Cell	15.50	14.51	1.26	-0.13	0.518	0.65
	5G NR-n7	DFT-S_15KHz QPSK20M	Bottom	0	502000	50	0	1	Ant 1	w/	6Cell	15.50	14.43	1.28	0.06	0.449	0.57
	5G NR-n7	DFT-S_15KHz QPSK20M	Bottom	0	507000	1	1	1	Ant 1	w/	6Cell	15.50	14.45	1.27	0.08	0.318	0.40
	5G NR-n7	DFT-S_15KHz QPSK20M	Bottom	0	512000	1	1	1	Ant 1	w/	6Cell	15.50	14.49	1.26	0.02	0.244	0.31
	5G NR-n7	DFT-S_15KHz QPSK20M	Bottom	0	502000	1	1	2	Ant 1	w/	6Cell	15.50	14.51	1.26	-0.01	0.457	0.58
	5G NR-n7	DFT-S_15KHz QPSK20M	Bottom	0	502000	1	1	3	Ant 1	w/	4Cell	15.50	14.51	1.26	0.05	0.441	0.56
	5G NR-n7	DFT-S_15KHz QPSK20M	Bottom	0	502000	1	1	4	Ant 1	w/	4Cell	15.50	14.51	1.26	0.13	0.397	0.50
	5G NR-n12	DFT-S_15KHz QPSK15M	Bottom	0	141500	1	1	1	Ant 0	w/	6Cell	19.50	19.27	1.05	0.01	0.612	0.64
	5G NR-n12	DFT-S_15KHz QPSK15M	Bottom	0	141500	36	0	1	Ant 0	w/	6Cell	19.50	19.07	1.10	0.09	0.622	0.68
	5G NR-n12	DFT-S_15KHz QPSK15M	Bottom	0	141300	36	0	1	Ant 0	w/	6Cell	19.50	19.06	1.11	-0.03	0.626	0.69
57	5G NR-n12	DFT-S_15KHz QPSK15M	Bottom	0	141700	36	0	1	Ant 0	w/	6Cell	19.50	19.03	1.11	-0.07	0.646	0.72
	5G NR-n12	DFT-S_15KHz QPSK15M	Bottom	0	141700	36	0	2	Ant 0	w/	6Cell	19.50	19.03	1.11	0.12	0.595	0.66
	5G NR-n12	DFT-S_15KHz QPSK15M	Bottom	0	141700	36	0	3	Ant 0	w/	4Cell	19.50	19.03	1.11	0.15	0.6078	0.67
	5G NR-n12	DFT-S_15KHz QPSK15M	Bottom	0	141700	36	0	4	Ant 0	w/	4Cell	19.50	19.03	1.11	0.16	0.576	0.64
	5G NR-n41	DFT-S_30KHz QPSK100M	Bottom	0	509202	1	1	1	Ant 1	w/	6Cell	14.00	13.86	1.03	-0.08	0.351	0.36
	5G NR-n41	DFT-S_30KHz QPSK100M	Bottom	0	509202	135	0	1	Ant 1	w/	6Cell	14.00	13.85	1.04	0.01	0.498	0.52
	5G NR-n41	DFT-S_30KHz QPSK100M	Bottom	0	513900	135	0	1	Ant 1	w/	6Cell	14.00	13.56	1.11	0.01	0.627	0.70
58	5G NR-n41	DFT-S_30KHz QPSK100M	Bottom	0	518598	135	0	1	Ant 1	w/	6Cell	14.00	13.78	1.05	0.05	0.707	0.74
	5G NR-n41	DFT-S_30KHz QPSK100M	Bottom	0	523299	135	0	1	Ant 1	w/	6Cell	14.00	13.70	1.07	0.1	0.649	0.69
	5G NR-n41	DFT-S_30KHz QPSK100M	Bottom	0	528000	135	0	1	Ant 1	w/	6Cell	14.00	13.74	1.06	0.07	0.585	0.62
	5G NR-n41	DFT-S_30KHz QPSK100M	Bottom	0	518598	135	0	2	Ant 1	w/	6Cell	14.00	13.78	1.05	0.12	0.655	0.69
	5G NR-n41	DFT-S_30KHz QPSK100M	Bottom	0	518598	135	0	3	Ant 1	w/	4Cell	14.00	13.78	1.05	-0.07	0.667	0.70
	5G NR-n41	DFT-S_30KHz QPSK100M	Bottom	0	518598	135	0	4	Ant 1	w/	4Cell	14.00	13.78	1.05	0.05	0.624	0.66

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Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	RB	offset	Sample	Ant Status	P-sensor	Battery	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (w/kg)	Scaled 1g SAR (w/kg)
59	5G NR-n66	DFT-S. 15KHz QPSK20M	Bottom	0	354000	1	1	1	Ant 0	w/	6Cell	15.50	15.30	1.05	0.03	0.562	0.59
	5G NR-n66	DFT-S. 15KHz QPSK20M	Bottom	0	354000	50	0	1	Ant 0	w/	6Cell	15.50	15.16	1.08	0.02	0.512	0.55
	5G NR-n66	DFT-S. 15KHz QPSK20M	Bottom	0	354000	1	1	1	Ant 1	w/	6Cell	15.50	15.30	1.05	-0.04	0.402	0.42
	5G NR-n66	DFT-S. 15KHz QPSK20M	Bottom	0	354000	50	0	1	Ant 1	w/	6Cell	15.50	15.16	1.08	0.05	0.377	0.41
	5G NR-n66	DFT-S. 15KHz QPSK20M	Bottom	0	344000	1	1	1	Ant 0	w/	6Cell	15.50	15.26	1.06	0.02	0.427	0.45
	5G NR-n66	DFT-S. 15KHz QPSK20M	Bottom	0	349000	1	1	1	Ant 0	w/	6Cell	15.50	15.11	1.09	0.11	0.471	0.51
	5G NR-n66	DFT-S. 15KHz QPSK20M	Bottom	0	354000	1	1	2	Ant 0	w/	6Cell	15.50	15.30	1.05	0.14	0.546	0.57
	5G NR-n66	DFT-S. 15KHz QPSK20M	Bottom	0	354000	1	1	3	Ant 0	w/	4Cell	15.50	15.30	1.05	0.18	0.538	0.56
	5G NR-n66	DFT-S. 15KHz QPSK20M	Bottom	0	354000	1	1	4	Ant 0	w/	4Cell	15.50	15.30	1.05	0.15	0.507	0.53

Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Ch.	Sample	Ant Status	Battery	Duty Cycle	Crest Factor	Max Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (w/kg)	Scaled 1g SAR (w/kg)
	WLAN2.4G	802.11b	Bottom	0	1	1	Ant 0	6Cell	99.90	1.00	16.00	16.00	1.00	-0.17	0.509	0.51
60	WLAN2.4G	802.11b	Bottom	0	1	1	Ant 1	6Cell	99.90	1.00	16.00	16.00	1.00	-0.05	0.595	0.60
	WLAN2.4G	802.11n HT40	Bottom	0	3	1	Ant 0+1	6Cell	98.20	1.02	19.00	18.95	1.01	-0.07	0.569	0.59
	WLAN2.4G	802.11b	Bottom	0	6	1	Ant 1	6Cell	99.90	1.00	16.00	15.90	1.02	-0.11	0.574	0.59
	WLAN2.4G	802.11b	Bottom	0	11	1	Ant 1	6Cell	99.90	1.00	16.00	15.85	1.04	-0.07	0.571	0.59
	WLAN2.4G	802.11b	Bottom	0	12	1	Ant 1	6Cell	99.90	1.00	16.00	15.80	1.05	0.18	0.549	0.58
	WLAN2.4G	802.11b	Bottom	0	13	1	Ant 1	6Cell	99.90	1.00	16.00	15.83	1.04	-0.01	0.552	0.57
	WLAN2.4G	802.11b	Bottom	0	1	2	Ant 1	6Cell	99.90	1.00	16.00	16.00	1.00	-0.16	0.539	0.54
	WLAN2.4G	802.11b	Bottom	0	1	3	Ant 1	4Cell	99.90	1.00	16.00	16.00	1.00	0.12	0.579	0.58
	WLAN2.4G	802.11b	Bottom	0	1	4	Ant 1	4Cell	99.90	1.00	16.00	16.00	1.00	-0.15	0.521	0.52
	WLAN5.3G	802.11ac VHT160	Bottom	0	50	1	Ant 0	6Cell	98.70	1.01	14.50	14.40	1.02	0.03	0.819	0.84
	WLAN5.3G	802.11ac VHT160	Bottom	0	50	1	Ant 1	6Cell	98.80	1.01	13.00	12.97	1.01	-0.02	0.589	0.60
61	WLAN5.3G	802.11ac VHT160	Bottom	0	50	1	Ant 0+1	6Cell	97.80	1.02	17.50	17.43	1.02	-0.12	1.01	1.05
	WLAN5.3G	802.11ac VHT160	Bottom	0	50	2	Ant 0+1	6Cell	97.80	1.02	17.50	17.43	1.02	-0.03	0.928	0.97
	WLAN5.3G	802.11ac VHT160	Bottom	0	50	3	Ant 0+1	4Cell	97.80	1.02	17.50	17.43	1.02	-0.12	0.937	0.97
	WLAN5.3G	802.11ac VHT160	Bottom	0	50	4	Ant 0+1	4Cell	97.80	1.02	17.50	17.43	1.02	0.01	0.907	0.94
	WLAN5.3G	802.11ac VHT160	Bottom	0	50	1	Ant 0+1	6Cell	97.80	1.02	17.50	17.43	1.02	0.08	0.985	1.02
	WLAN5.6G	802.11ac VHT160	Bottom	0	114	1	Ant 0	6Cell	98.70	1.01	12.00	11.92	1.02	0.05	0.461	0.47
62	WLAN5.6G	802.11ac VHT160	Bottom	0	114	1	Ant 1	6Cell	98.80	1.01	13.00	12.93	1.02	-0.15	0.786	0.81
	WLAN5.6G	802.11ac VHT160	Bottom	0	114	1	Ant 0+1	6Cell	97.80	1.02	15.00	14.95	1.01	0.07	0.666	0.69
	WLAN5.6G	802.11ac VHT160	Bottom	0	114	2	Ant 1	6Cell	98.80	1.01	13.00	12.93	1.02	-0.03	0.677	0.70
	WLAN5.6G	802.11ac VHT160	Bottom	0	114	3	Ant 1	4Cell	98.80	1.01	13.00	12.93	1.02	0.07	0.744	0.77
	WLAN5.6G	802.11ac VHT160	Bottom	0	114	4	Ant 1	4Cell	98.80	1.01	13.00	12.93	1.02	-0.09	0.631	0.65
	WLAN5.8G	802.11ac VHT80	Bottom	0	155	1	Ant 0	6Cell	98.90	1.01	12.00	11.90	1.02	-0.07	0.646	0.67
63	WLAN5.8G	802.11ac VHT80	Bottom	0	155	1	Ant 1	6Cell	97.60	1.02	13.50	13.50	1.00	-0.03	0.987	1.01
	WLAN5.8G	802.11ac VHT80	Bottom	0	155	1	Ant 0+1	6Cell	97.80	1.02	15.50	15.37	1.03	0.11	0.887	0.93
	WLAN5.8G	802.11ac VHT80	Bottom	0	155	2	Ant 1	6Cell	97.60	1.02	13.50	13.50	1.00	-0.05	0.959	0.98
	WLAN5.8G	802.11ac VHT80	Bottom	0	155	3	Ant 1	4Cell	97.60	1.02	13.50	13.50	1.00	0.1	0.956	0.98
	WLAN5.8G	802.11ac VHT80	Bottom	0	155	4	Ant 1	4Cell	97.60	1.02	13.50	13.50	1.00	0.13	0.895	0.91
	WLAN5.8G	802.11ac VHT80	Bottom	0	155	1	Ant 1	6Cell	97.60	1.02	13.50	13.50	1.00	-0.02	0.972	0.99
	BT	BDR	Bottom	0	78	1	Ant 1	6Cell	77.06	1.30	10.50	10.37	1.03	0.13	0.083	0.11
64	BT	BDR	Bottom	0	0	1	Ant 1	6Cell	77.06	1.30	10.50	8.91	1.44	-0.08	0.107	0.20
	BT	BDR	Bottom	0	39	1	Ant 1	6Cell	77.06	1.30	10.50	9.34	1.31	0.05	0.095	0.16
	BT	BDR	Bottom	0	0	2	Ant 1	6Cell	77.06	1.30	10.50	8.91	1.44	-0.09	0.083	0.16
	BT	BDR	Bottom	0	0	3	Ant 1	4Cell	77.06	1.30	10.50	8.91	1.44	0.12	0.092	0.17
	BT	BDR	Bottom	0	0	4	Ant 1	4Cell	77.06	1.30	10.50	8.91	1.44	0.07	0.074	0.14

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4.7.3 SAR Measurement Variability

According to KDB 865664 D01, SAR measurement variability was assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. Alternatively, if the highest measured SAR for both head and body tissue-equivalent media are ≤ 1.45 W/kg and the ratio of these highest SAR values, i.e., largest divided by smallest value, is ≤ 1.10 , the highest SAR configuration for either head or body tissue-equivalent medium may be used to perform the repeated measurement. These additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR repeated measurement procedure:

1. When the highest measured SAR is < 0.80 W/kg, repeated measurement is not required.
2. When the highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
3. If the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 , or when the original or repeated measurement is ≥ 1.45 W/kg, perform a second repeated measurement.
4. If the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 , and the original, first or second repeated measurement is ≥ 1.5 W/kg, perform a third repeated measurement.

Tablet Mode

Band	Mode	Test Position	Ch.	Original Measured SAR-1g (W/kg)	1st Repeated SAR-1g (W/kg)	L/S Ratio	2nd Repeated SAR-1g (W/kg)	L/S Ratio	3rd Repeated SAR-1g (W/kg)	L/S Ratio
WCDMA V	RMC12.2K	Rear Face	4132	0.973	0.951	1.02	N/A	N/A	N/A	N/A
LTE14	QPSK10M	Rear Face	23330	1.01	0.989	1.02	N/A	N/A	N/A	N/A
LTE17	QPSK20M	Rear Face	23780	1.06	1.01	1.05	N/A	N/A	N/A	N/A
LTE30	QPSK10M	Rear Face	27710	1.01	0.989	1.02	N/A	N/A	N/A	N/A
LTE42	QPSK20M	Rear Face	41690	0.994	0.979	1.02	N/A	N/A	N/A	N/A
WLAN2.4G	802.11b	Rear Face	6	1.03	0.991	1.04	N/A	N/A	N/A	N/A
WLAN5.2G	802.11ac VHT80	Top Side	42	1.16	1.11	1.05	N/A	N/A	N/A	N/A
WLAN5.6G	802.11ac VHT160	Top Side	114	1.06	1.02	1.04	N/A	N/A	N/A	N/A
WLAN5.8G	802.11ac VHT80	Top Side	155	1.17	1.08	1.08	N/A	N/A	N/A	N/A

Laptop Mode

Band	Mode	Test Position	Ch.	Original Measured SAR-1g (W/kg)	1st Repeated SAR-1g (W/kg)	L/S Ratio	2nd Repeated SAR-1g (W/kg)	L/S Ratio	3rd Repeated SAR-1g (W/kg)	L/S Ratio
WCDMA IV	RMC12.2K	Bottom	1513	0.888	0.852	1.04	N/A	N/A	N/A	N/A
WCDMA V	RMC12.2K	Bottom	4233	0.907	0.888	1.02	N/A	N/A	N/A	N/A
LTE42	QPSK20M	Bottom	41690	1.01	0.978	1.03	N/A	N/A	N/A	N/A
WLAN5.3G	802.11ac VHT160	Bottom	50	1.01	0.985	1.03	N/A	N/A	N/A	N/A
WLAN5.6G	802.11ac VHT80	Bottom	138	0.838	0.819	1.02	N/A	N/A	N/A	N/A
WLAN5.8G	802.11ac VHT80	Bottom	155	0.987	0.972	1.02	N/A	N/A	N/A	N/A

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4.7.4 Simultaneous Multi-band Transmission Evaluation

<Possibilities of Simultaneous Transmission>

The simultaneous transmission possibilities for this device are listed as below.

Simultaneous TX Combination	Capable Transmit Configurations	Body Exposure Condition
1	WWAN + WLAN2.4G_Ant0	Yes
2	WWAN + WLAN2.4G_Ant1	Yes
3	WWAN + WLAN5G_Ant0	Yes
4	WWAN + WLAN5G_Ant1	Yes
5	WWAN + BT_Ant1	Yes
6	WWAN + WLAN2.4G_Ant0+BT_Ant1	Yes
7	WWAN + WLAN5G_Ant0+BT_Ant1	Yes
8	WWAN + WLAN2.4G_Ant0+1	Yes
9	WWAN + WLAN5G_Ant0+1	Yes
10	WWAN + WLAN5G_Ant0+1+BT_Ant1	Yes

Note :

1. The WLAN 2.4G and WLAN 5G cannot transmit simultaneously.
2. Combination 1 is covered by Combination 6
3. Combination 3 is covered by Combination 7
4. Combination 5 is covered by Combination 10
5. Combination 9 is covered by Combination 10"

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<SAR Summation Analysis>

Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneous transmitting antenna. When the sum of SAR_{1g} of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the SAR limit (SAR_{1g} 1.6 W/kg), the simultaneous transmission SAR is not required. When the sum of SAR_{1g} is greater than the SAR limit (SAR_{1g} 1.6 W/kg), SAR test exclusion is determined by the SPLSR.

Refer to Appendix G

SAR Test Report

<SAR to Peak Location Separation Ratio Analysis>

The simultaneous transmitting antennas in each operating mode and exposure condition combination are considered one pair at a time to determine the SPLSR. When SAR is measured for both antennas in the pair, the peak location separation distance is computed by the following formula.

$$\text{Peak Location Separation Distance} = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2 + (z_1 - z_2)^2}$$

Where (x_1, y_1, z_1) and (x_2, y_2, z_2) are the coordinates of the extrapolated peak SAR locations in the area or zoom scans.

When standalone test exclusion applies, SAR is estimated; the peak location is assumed to be at the feed-point or geometric center of the antenna. Due to curvatures on the SAM phantom, when SAR is estimated for one of the antennas in an antenna pair, the measured peak SAR location will be translated onto the test device to determine the peak location separation for the antenna pair.

The SPLSR is determined by the following formula.

$$\text{SPLSR} = \frac{(\text{SAR}_1 + \text{SAR}_2)^{1.5}}{R_i}$$

Where SAR_1 and SAR_2 are the highest reported or estimated SAR for each antenna in the pair, and R_i is the separation distance between the peak SAR locations for the antenna pair in mm.

When the SPLSR is ≤ 0.04 , the simultaneous transmission SAR is not required. Otherwise, the enlarged zoom scan and volume scan post-processing procedures will be performed.

Refer to Appendix H

Test Engineer : Sam Onn, and Willy Chang

5. Calibration of Test Equipment

Equipment	Manufacturer	Model	SN	Cal. Date	Cal. Interval
System Validation Dipole	SPEAG	D750V3	1013	Aug. 23, 2019	1 Year
System Validation Dipole	SPEAG	D835V2	4d121	Aug. 23, 2019	1 Year
System Validation Dipole	SPEAG	D1750V2	1055	Aug. 23, 2019	1 Year
System Validation Dipole	SPEAG	D1900V2	5d036	Jan. 21, 2020	1 Year
System Validation Dipole	SPEAG	D2300V2	1004	Jan. 21, 2020	1 Year
System Validation Dipole	SPEAG	D2450V2	737	Aug. 26, 2019	1 Year
System Validation Dipole	SPEAG	D2600V2	1020	Aug. 26, 2019	1 Year
System Validation Dipole	SPEAG	D3500V2	1007	Feb. 25, 2020	1 Year
System Validation Dipole	SPEAG	D3700V2	1017	Sep. 24, 2019	1 Year
System Validation Dipole	SPEAG	D5GHzV2	1019	Mar. 13, 2020	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	3650	Mar. 25, 2020	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	3971	Jan. 27, 2020	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	3898	Jun. 27, 2019	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	7472	Aug. 30, 2019	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	7537	Jun. 18, 2019	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	3820	Jun. 25, 2020	1 Year
Data Acquisition Electronics	SPEAG	DAE3	579	Aug. 27, 2019	1 Year
Data Acquisition Electronics	SPEAG	DAE4	914	Jun. 20, 2019	1 Year
Data Acquisition Electronics	SPEAG	DAE4	1431	Mar. 18, 2020	1 Year
Data Acquisition Electronics	SPEAG	DAE4	1277	Jan. 24, 2020	1 Year
Data Acquisition Electronics	SPEAG	DAE4	1585	Jun. 07, 2019	1 Year
Data Acquisition Electronics	SPEAG	DAE4	393	Apr. 30, 2020	1 Year
Radio Communication Analyzer	Anritsu	MT8821C	6201381727	Jun. 14, 2019	1 Year
Universal Radio Communication Tester	Anritsu	MT8821C	6261786083	Jun. 27, 2019	1 Year
Universal Radio Communication Tester	Anritsu	MT8821C	6261786083	Jun. 19, 2020	1 Year
Spectrum Analyzer	R&S	FSL6	102006	Mar. 26, 2020	1 Year
ENA Series Network Analyzer	Agilent	E5071C	MY46214281	Jun. 17, 2019	1 Year
ENA Series Network Analyzer	Agilent	E5071C	MY46214281	Jun. 19, 2020	1 Year
Universal Wireless Test Set	Anritsu	MT8870A/MU8 87000A	6201699387	Oct. 07, 2019	1 Year
Thermometer	YFE	YF-160A	120702365	Aug. 06, 2019	1 Year
Thermometer	YFE	YF-160A	150601220	May. 25, 2020	1 Year
Dielectric Assessment Kit	SPEAG	DAK-3.5	1151	Aug. 20, 2019	1 Year
Powersource1	SPEAG	SE_UMS_160 BA	4010	Aug. 21, 2019	1 Year

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6. Measurement Uncertainty

Source of Uncertainty	Uncertainty (± %)	Probability Distribution	Divisor	Ci (1g)	Ci (10g)	Standard Uncertainty (± %, 1g)	Standard Uncertainty (± %, 10g)	Vi
Measurement System								
Probe Calibration	6.0	Normal	1	1	1	6.0	6.0	∞
Axial Isotropy	4.7	Rectangular	√3	√0.5	√0.5	1.9	1.9	∞
Hemispherical Isotropy	9.6	Rectangular	√3	√0.5	√0.5	3.9	3.9	∞
Boundary Effect	1.0	Rectangular	√3	1	1	0.6	0.6	∞
Linearity	4.7	Rectangular	√3	1	1	2.7	2.7	∞
Detection Limits	0.25	Rectangular	√3	1	1	0.14	0.14	∞
Probe Modulation Response	4.8	Rectangular	√3	1	1	2.8	2.8	∞
Readout Electronics	0.3	Normal	1	1	1	0.3	0.3	∞
Response Time	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Integration Time	1.7	Rectangular	√3	1	1	1.0	1.0	∞
RF Ambient Conditions – Noise	3.0	Rectangular	√3	1	1	1.7	1.7	∞
RF Ambient Conditions – Reflections	3.0	Rectangular	√3	1	1	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	0.02	Rectangular	√3	1	1	0.01	0.01	∞
Probe Positioning with Respect to Phantom	0.4	Rectangular	√3	1	1	0.2	0.2	∞
Post-processing	2.0	Rectangular	√3	1	1	1.2	1.2	∞
Test Sample Related								
Test Sample Positioning	2.82 / 1.60	Normal	1	1	1	2.8	1.6	35
Device Holder Uncertainty	2.55 / 2.76	Normal	1	1	1	2.6	2.8	7
Power Drift of Measurement	5.0	Rectangular	√3	1	1	2.9	2.9	∞
PowerScaling	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Phantom and Setup								
Phantom Uncertainty (Shape and Thickness Tolerances)	5.7	Rectangular	√3	1	1	3.3	3.3	∞
Liquid Conductivity (Temperature Uncertainty)	2.58	Rectangular	√3	0.78	0.71	1.2	1.1	∞
Liquid Conductivity (Measured)	2.95	Normal	1	0.78	0.71	2.3	2.1	61
Liquid Permittivity (Temperature Uncertainty)	1.97	Rectangular	√3	0.23	0.26	0.3	0.3	∞
Liquid Permittivity (Measured)	3.04	Normal	1	0.23	0.26	0.7	0.8	47
Combined Standard Uncertainty						± 10.9 %	± 10.7 %	
Expanded Uncertainty (K=2)						± 21.8 %	± 21.4 %	

Head SAR Uncertainty Budget for Frequency Range of 300 MHz to 3 GHz

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Source of Uncertainty	Uncertainty ($\pm$ %)	Probability Distribution	Divisor	Ci (1g)	Ci (10g)	Standard Uncertainty ($\pm$ %, 1g)	Standard Uncertainty ($\pm$ %, 10g)	Vi
Measurement System								
Probe Calibration	6.55	Normal	1	1	1	6.55	6.55	∞
Axial Isotropy	4.7	Rectangular	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞
Hemispherical Isotropy	9.6	Rectangular	$\sqrt{3}$	0.7	0.7	3.9	3.9	∞
Boundary Effect	2.0	Rectangular	$\sqrt{3}$	1	1	1.2	1.2	∞
Linearity	4.7	Rectangular	$\sqrt{3}$	1	1	2.7	2.7	∞
Detection Limits	0.25	Rectangular	$\sqrt{3}$	1	1	0.14	0.14	∞
Probe Modulation Response	4.8	Rectangular	$\sqrt{3}$	1	1	2.8	2.8	∞
Readout Electronics	0.3	Normal	1	1	1	0.3	0.3	∞
Response Time	0.0	Rectangular	$\sqrt{3}$	1	1	0.0	0.0	∞
Integration Time	1.7	Rectangular	$\sqrt{3}$	1	1	1.0	1.0	∞
RF Ambient Conditions – Noise	3.0	Rectangular	$\sqrt{3}$	1	1	1.7	1.7	∞
RF Ambient Conditions – Reflections	3.0	Rectangular	$\sqrt{3}$	1	1	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	0.04	Rectangular	$\sqrt{3}$	1	1	0.02	0.02	∞
Probe Positioning with Respect to Phantom	0.8	Rectangular	$\sqrt{3}$	1	1	0.5	0.5	∞
Post-processing	4.0	Rectangular	$\sqrt{3}$	1	1	2.3	2.3	∞
Test Sample Related								
Test Sample Positioning	2.82 / 1.60	Normal	1	1	1	2.8	1.6	35
Device Holder Uncertainty	2.55 / 2.76	Normal	1	1	1	2.6	2.8	7
Power Drift of Measurement	5.0	Rectangular	$\sqrt{3}$	1	1	2.9	2.9	∞
PowerScaling	0.0	Rectangular	$\sqrt{3}$	1	1	0.0	0.0	∞
Phantom and Setup								
Phantom Uncertainty (Shape and Thickness Tolerances)	6.2	Rectangular	$\sqrt{3}$	1	1	3.6	3.6	∞
Liquid Conductivity (Temperature Uncertainty)	2.58	Rectangular	$\sqrt{3}$	0.78	0.71	1.2	1.1	∞
Liquid Conductivity (Measured)	2.95	Normal	1	0.78	0.71	2.3	2.1	61
Liquid Permittivity (Temperature Uncertainty)	1.97	Rectangular	$\sqrt{3}$	0.23	0.26	0.3	0.3	∞
Liquid Permittivity (Measured)	3.04	Normal	1	0.23	0.26	0.7	0.8	47
Combined Standard Uncertainty						± 11.6 %	± 11.3 %	
Expanded Uncertainty (K=2)						± 23.2 %	± 22.6 %	

Head SAR Uncertainty Budget for Frequency Range of 3 GHz to 6 GHz

SAR Test Report

Source of Uncertainty	Uncertainty (± %)	Probability Distribution	Divisor	Ci (1g)	Ci (10g)	Standard Uncertainty (± %, 1g)	Standard Uncertainty (± %, 10g)	Vi
Measurement System								
Probe Calibration	6.0	Normal	1	1	1	6.0	6.0	∞
Axial Isotropy	4.7	Rectangular	√3	√0.5	√0.5	1.9	1.9	∞
Hemispherical Isotropy	9.6	Rectangular	√3	√0.5	√0.5	3.9	3.9	∞
Boundary Effect	1.0	Rectangular	√3	1	1	0.6	0.6	∞
Linearity	4.7	Rectangular	√3	1	1	2.7	2.7	∞
Detection Limits	0.25	Rectangular	√3	1	1	0.14	0.14	∞
Probe Modulation Response	4.8	Rectangular	√3	1	1	2.8	2.8	∞
Readout Electronics	0.3	Normal	1	1	1	0.3	0.3	∞
Response Time	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Integration Time	1.7	Rectangular	√3	1	1	1.0	1.0	∞
RF Ambient Conditions – Noise	3.0	Rectangular	√3	1	1	1.7	1.7	∞
RF Ambient Conditions – Reflections	3.0	Rectangular	√3	1	1	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	0.02	Rectangular	√3	1	1	0.01	0.01	∞
Probe Positioning with Respect to Phantom	0.4	Rectangular	√3	1	1	0.2	0.2	∞
Post-processing	2.0	Rectangular	√3	1	1	1.2	1.2	∞
Test Sample Related								
Test Sample Positioning	3.68 / 1.73	Normal	1	1	1	3.7	1.7	29
Device Holder Uncertainty	2.55 / 2.76	Normal	1	1	1	2.6	2.8	7
Power Drift of Measurement	5.0	Rectangular	√3	1	1	2.9	2.9	∞
PowerScaling	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Phantom and Setup								
Phantom Uncertainty (Shape and Thickness Tolerances)	7.2	Rectangular	√3	1	1	4.2	4.2	∞
Liquid Conductivity (Temperature Uncertainty)	2.58	Rectangular	√3	0.78	0.71	1.2	1.1	∞
Liquid Conductivity (Measured)	2.95	Normal	1	0.78	0.71	2.3	2.1	61
Liquid Permittivity (Temperature Uncertainty)	1.97	Rectangular	√3	0.23	0.26	0.3	0.3	∞
Liquid Permittivity (Measured)	3.04	Normal	1	0.23	0.26	0.7	0.8	47
Combined Standard Uncertainty						± 11.5 %	± 11.0 %	
Expanded Uncertainty (K=2)						± 23.0 %	± 22.0 %	

Body SAR Uncertainty Budget for Frequency Range of 300 MHz to 3 GHz

SAR Test Report

Source of Uncertainty	Uncertainty (± %)	Probability Distribution	Divisor	Ci (1g)	Ci (10g)	Standard Uncertainty (± %, 1g)	Standard Uncertainty (± %, 10g)	Vi
Measurement System								
Probe Calibration	6.55	Normal	1	1	1	6.55	6.55	∞
Axial Isotropy	4.7	Rectangular	√3	0.7	0.7	1.9	1.9	∞
Hemispherical Isotropy	9.6	Rectangular	√3	0.7	0.7	3.9	3.9	∞
Boundary Effect	2.0	Rectangular	√3	1	1	1.2	1.2	∞
Linearity	4.7	Rectangular	√3	1	1	2.7	2.7	∞
Detection Limits	0.25	Rectangular	√3	1	1	0.14	0.14	∞
Probe Modulation Response	4.8	Rectangular	√3	1	1	2.8	2.8	∞
Readout Electronics	0.3	Normal	1	1	1	0.3	0.3	∞
Response Time	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Integration Time	1.7	Rectangular	√3	1	1	1.0	1.0	∞
RF Ambient Conditions – Noise	3.0	Rectangular	√3	1	1	1.7	1.7	∞
RF Ambient Conditions – Reflections	3.0	Rectangular	√3	1	1	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	0.04	Rectangular	√3	1	1	0.02	0.02	∞
Probe Positioning with Respect to Phantom	0.8	Rectangular	√3	1	1	0.5	0.5	∞
Post-processing	4.0	Rectangular	√3	1	1	2.3	2.3	∞
Test Sample Related								
Test Sample Positioning	3.68 / 1.73	Normal	1	1	1	3.7	1.7	29
Device Holder Uncertainty	2.55 / 2.76	Normal	1	1	1	2.6	2.8	7
Power Drift of Measurement	5.0	Rectangular	√3	1	1	2.9	2.9	∞
PowerScaling	0.0	Rectangular	√3	1	1	0.0	0.0	∞
Phantom and Setup								
Phantom Uncertainty (Shape and Thickness Tolerances)	7.6	Rectangular	√3	1	1	4.4	4.4	∞
Liquid Conductivity (Temperature Uncertainty)	2.58	Rectangular	√3	0.78	0.71	1.2	1.1	∞
Liquid Conductivity (Measured)	2.95	Normal	1	0.78	0.71	2.3	2.1	61
Liquid Permittivity (Temperature Uncertainty)	1.97	Rectangular	√3	0.23	0.26	0.3	0.3	∞
Liquid Permittivity (Measured)	3.04	Normal	1	0.23	0.26	0.7	0.8	47
Combined Standard Uncertainty						± 12.1 %	± 11.6 %	
Expanded Uncertainty (K=2)						± 24.2 %	± 23.2 %	

Body SAR Uncertainty Budget for Frequency Range of 3 GHz to 6 GHz

7. Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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Web Site: <https://ee.bureauveritas.com.tw/BVInternet/Default>

The road map of all our labs can be found in our web site also.

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Appendix A. SAR Plots of System Verification

The plots for system verification with largest deviation for each SAR system combination are shown as follows.

System Check_H750_200530

DUT: Dipole 750 MHz; Type: D750V3; SN: 1013

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: H06T09N1_0530 Medium parameters used: $f = 750$ MHz; $\sigma = 0.892$ S/m; $\epsilon_r = 42.799$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(10.19, 10.19, 10.19) @ 750 MHz; Calibrated: 2019/06/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 2019/06/20
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.519 W/kg

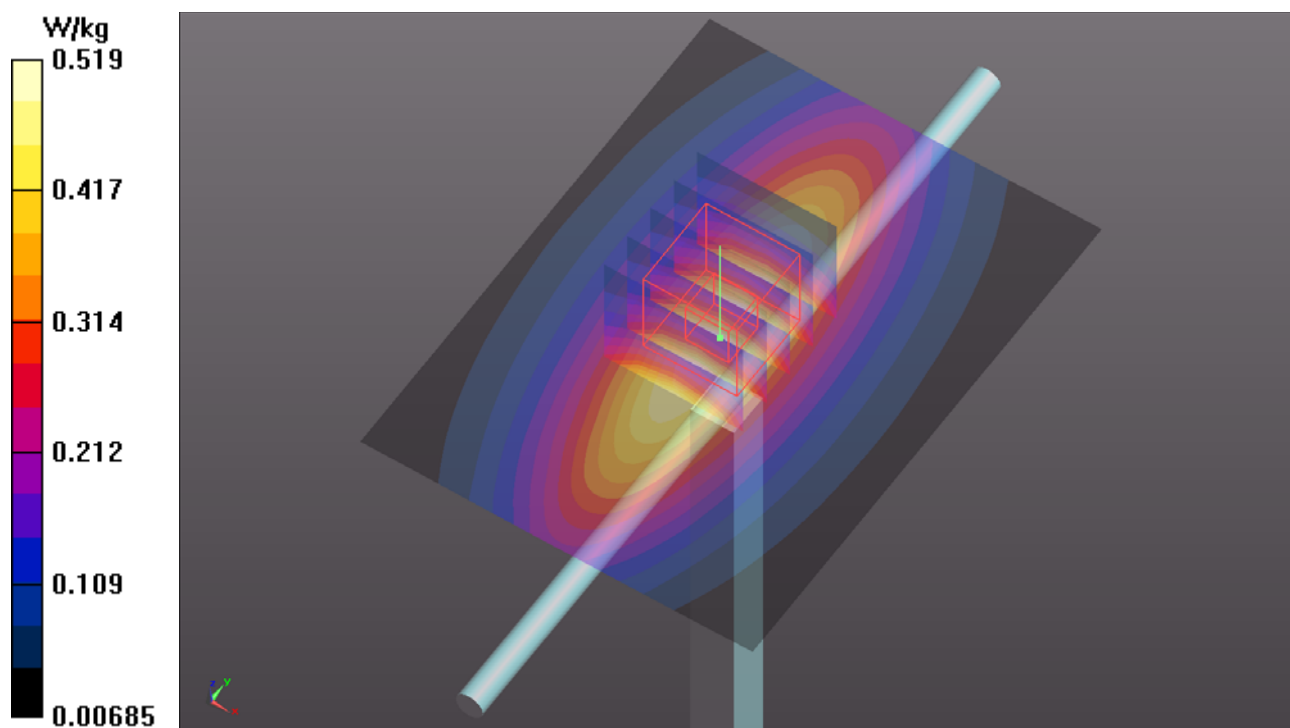
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 25.21 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.592 W/kg

SAR(1 g) = 0.391 W/kg; SAR(10 g) = 0.256 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.523 W/kg



System Check_H835_200424

DUT: Dipole 835 MHz; Type: D835V2; SN: 4d121

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: H07T10N4_0424 Medium parameters used: $f = 835$ MHz; $\sigma = 0.901$ S/m; $\epsilon_r = 42.636$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.8 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(10.26, 10.26, 10.26) @ 835 MHz; Calibrated: 2020/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2020/01/24
- Phantom: ELI Phantom_1245; Type: QDOVA002AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.569 W/kg

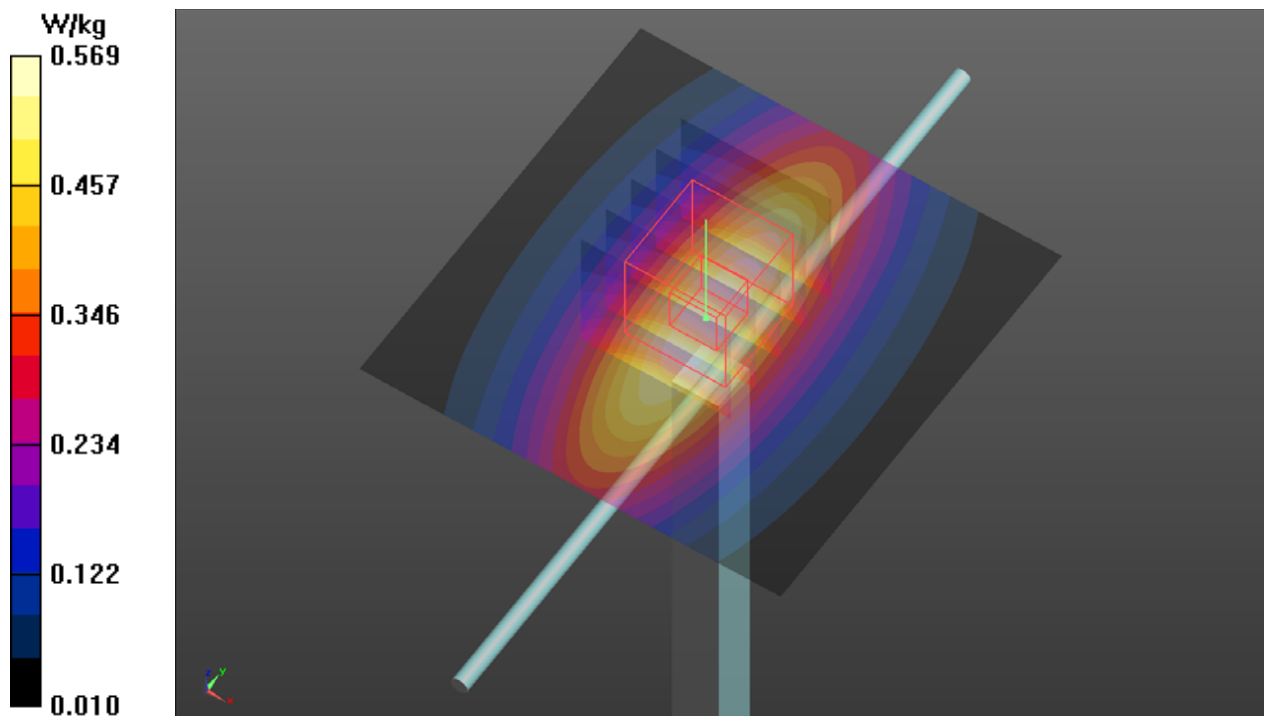
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.66 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.642 W/kg

SAR(1 g) = 0.444 W/kg; SAR(10 g) = 0.292 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.579 W/kg



System Check_H835_200529

DUT: Dipole 835 MHz; Type: D835V2; SN: 4d121

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: H07T10N1_0529 Medium parameters used: $f = 835$ MHz; $\sigma = 0.928$ S/m; $\epsilon_r = 42.517$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7472; ConvF(10.18, 10.18, 10.18) @ 835 MHz; Calibrated: 2019/08/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2019/08/27
- Phantom: ELI Phantom_2105; Type: QD OVA 004 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.596 W/kg

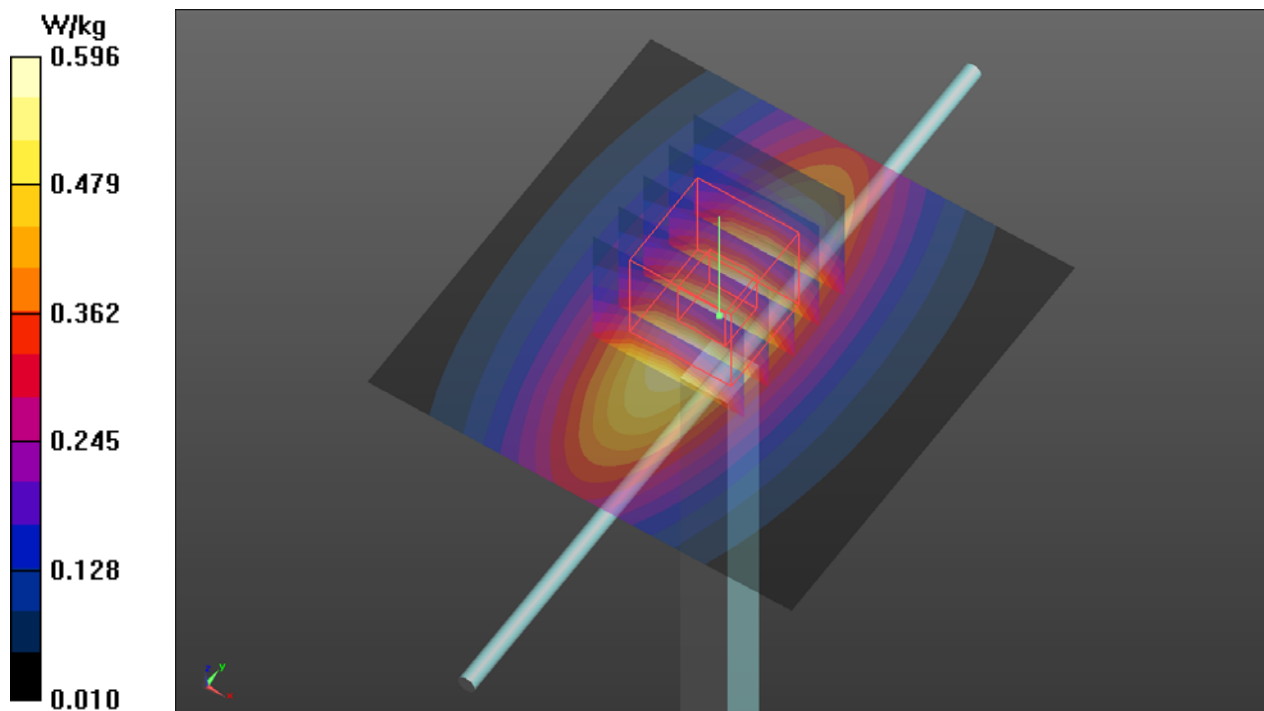
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.46 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.669 W/kg

SAR(1 g) = 0.444 W/kg; SAR(10 g) = 0.292 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 0.598 W/kg



System Check_H1750_200528

DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1055

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: H16T20N1_0528 Medium parameters used: $f = 1750$ MHz; $\sigma = 1.325$ S/m; $\epsilon_r = 38.859$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7472; ConvF(8.68, 8.68, 8.68) @ 1750 MHz; Calibrated: 2019/08/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2019/08/27
- Phantom: ELI Phantom_2105; Type: QD OVA 004 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.30 W/kg

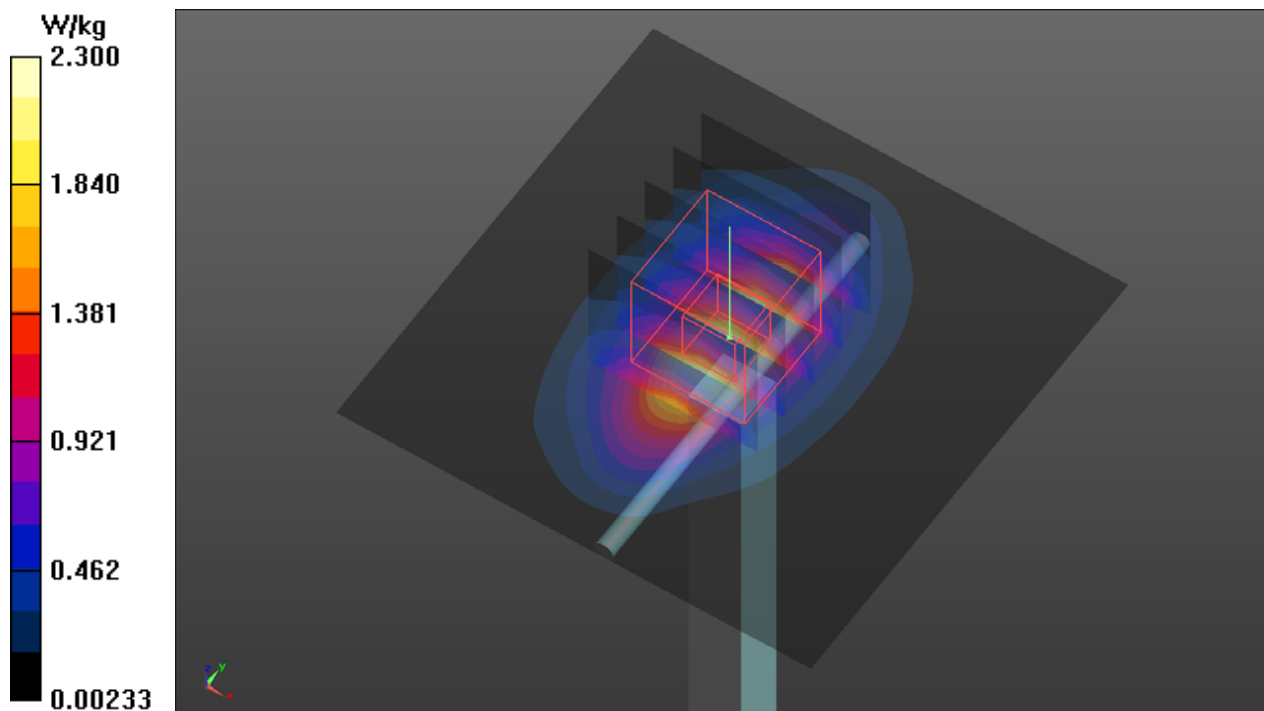
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 42.90 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 2.76 W/kg

SAR(1 g) = 1.69 W/kg; SAR(10 g) = 0.917 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 2.34 W/kg



System Check_H1900_200528

DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: H16T20N1_0528 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.447$ S/m; $\epsilon_r = 38.318$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7472; ConvF(8.34, 8.34, 8.34) @ 1900 MHz; Calibrated: 2019/08/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2019/08/27
- Phantom: ELI Phantom_2105; Type: QD OVA 004 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 3.10 W/kg

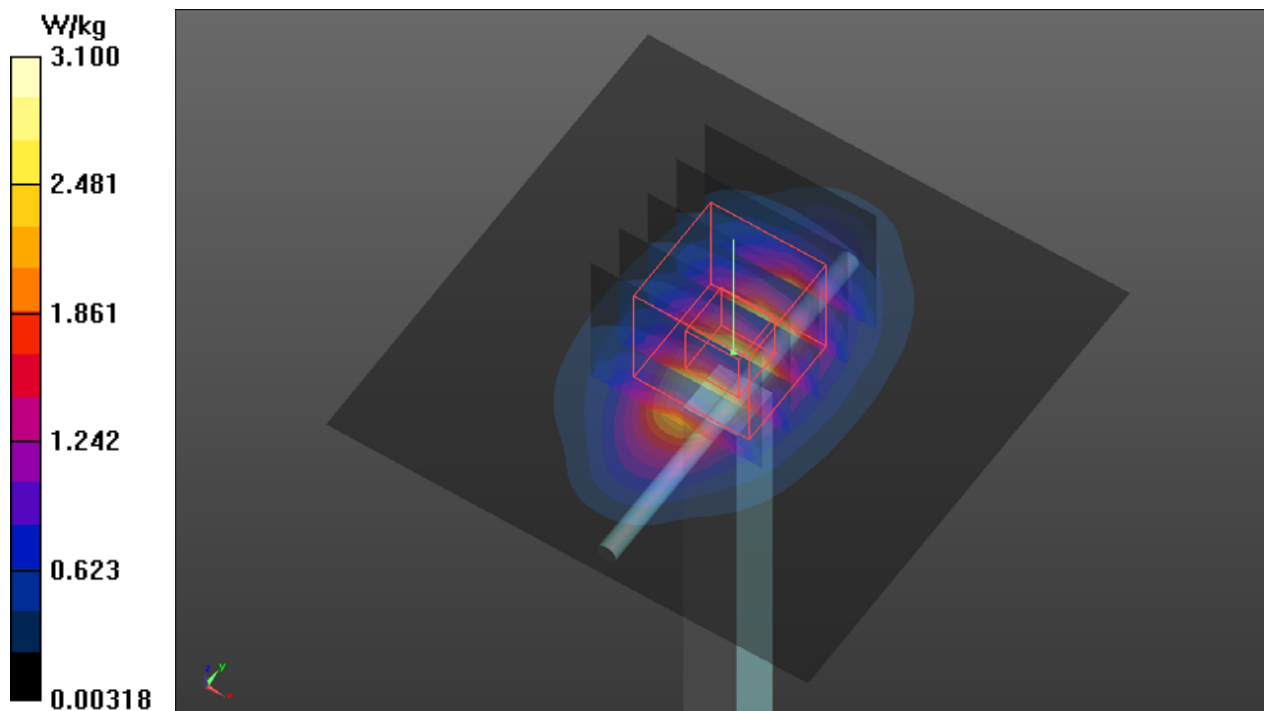
Pin=50mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 47.79 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 3.74 W/kg

SAR(1 g) = 1.92 W/kg; SAR(10 g) = 1.01 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.11 W/kg



System Check_H2300_200515

DUT: Dipole 2300 MHz; Type: D2300V2; SN: 1004

Communication System: UID 0, CW; Frequency: 2300 MHz; Duty Cycle: 1:1

Medium: H19T27N3_0515 Medium parameters used: $f = 2300$ MHz; $\sigma = 1.717$ S/m; $\epsilon_r = 39.723$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.8 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(8.03, 8.03, 8.03) @ 2300 MHz; Calibrated: 2019/06/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 2019/06/20
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 4.00 W/kg

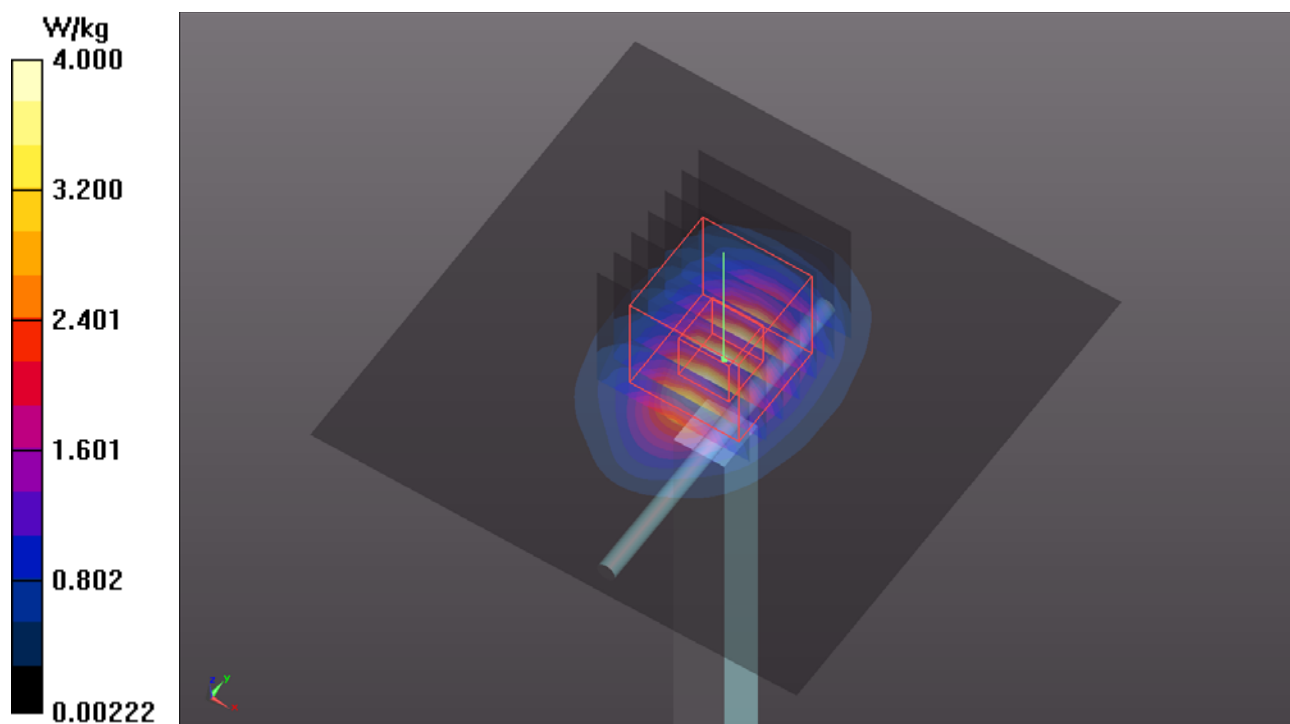
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 49.56 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 4.97 W/kg

SAR(1 g) = 2.39 W/kg; SAR(10 g) = 1.15 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.01 W/kg



System Check_H2450_200521

DUT: Dipole 2450 MHz; Type: D2450V2; SN: 737

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: H19T27N1_0521 Medium parameters used (interpolated): $f = 2450$ MHz; $\sigma = 1.87$ S/m; $\epsilon_r = 39.052$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(8, 8, 8) @ 2450 MHz; Calibrated: 2020/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2020/01/24
- Phantom: ELI Phantom_1245; Type: QDOVA002AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 4.20 W/kg

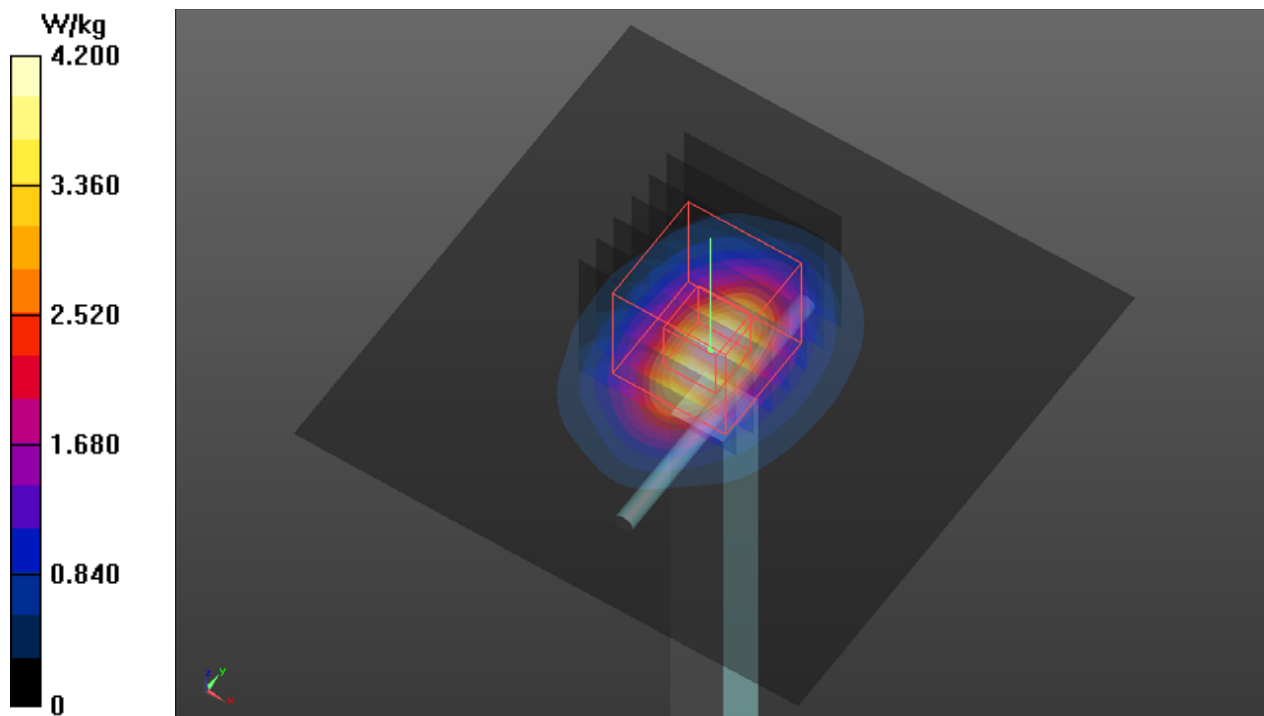
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 47.96 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 5.24 W/kg

SAR(1 g) = 2.46 W/kg; SAR(10 g) = 1.16 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.21 W/kg



System Check_H2600_200514

DUT: Dipole 2600 MHz; Type: D2600V2; SN: 1020

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: H19T27N3_0514 Medium parameters used: $f = 2600$ MHz; $\sigma = 2.013$ S/m; $\epsilon_r = 37.293$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(7.19, 7.19, 7.19) @ 2600 MHz; Calibrated: 2019/06/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2019/06/07
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 4.81 W/kg

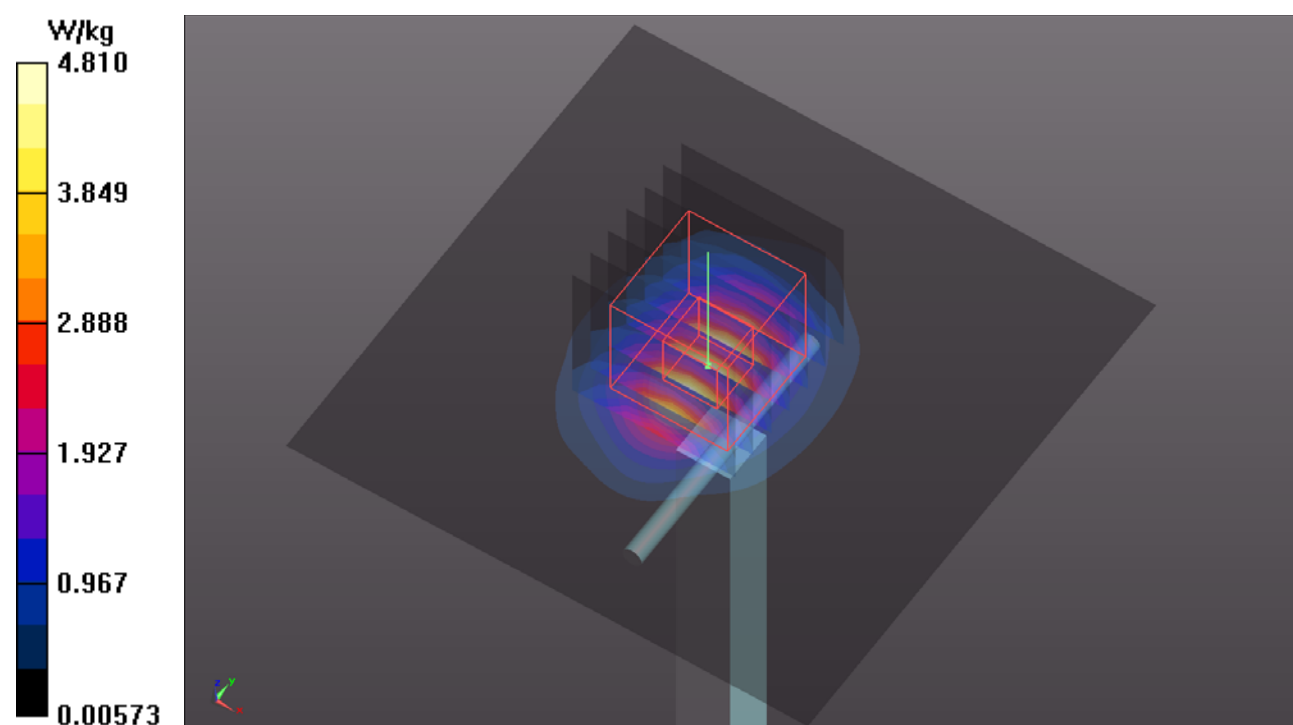
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 49.68 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 6.18 W/kg

SAR(1 g) = 2.77 W/kg; SAR(10 g) = 1.26 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.91 W/kg



System Check_H3500_200526

DUT: Dipole 3500 MHz; Type:D3500V2; SN: 1007

Communication System: UID 0, CW; Frequency: 3500 MHz;Duty Cycle: 1:1

Medium: H34T38N3_0526 Medium parameters used: $f = 3500$ MHz; $\sigma = 2.89$ S/m; $\epsilon_r = 36.442$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(7.03, 7.03, 7.03) @ 3500 MHz; Calibrated: 2019/6/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 2019/6/20
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 5.31 W/kg

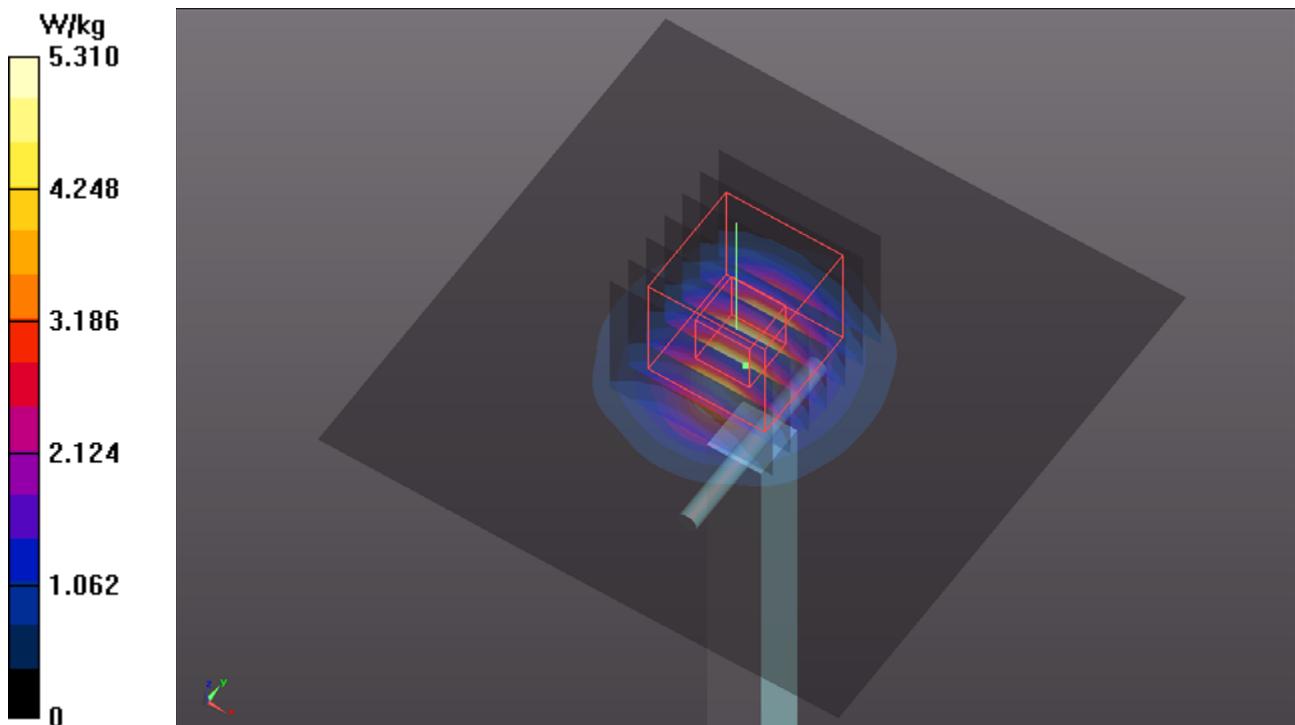
Pin=50mW/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2.5mm

Reference Value = 44.72 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 7.15 W/kg

SAR(1 g) = 3.05 W/kg; SAR(10 g) = 1.21 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 5.03 W/kg



System Check_H3700_200518

DUT: Dipole 3700 MHz; Type: D3700V2; SN: 1017

Communication System: UID 0, CW; Frequency: 3700 MHz; Duty Cycle: 1:1

Medium: H34T38N1_0518 Medium parameters used: $f = 3700$ MHz; $\sigma = 3.039$ S/m; $\epsilon_r = 36.271$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(6.66, 6.66, 6.66) @ 3700 MHz; Calibrated: 2020/03/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1431; Calibrated: 2020/03/18
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 7.02 W/kg

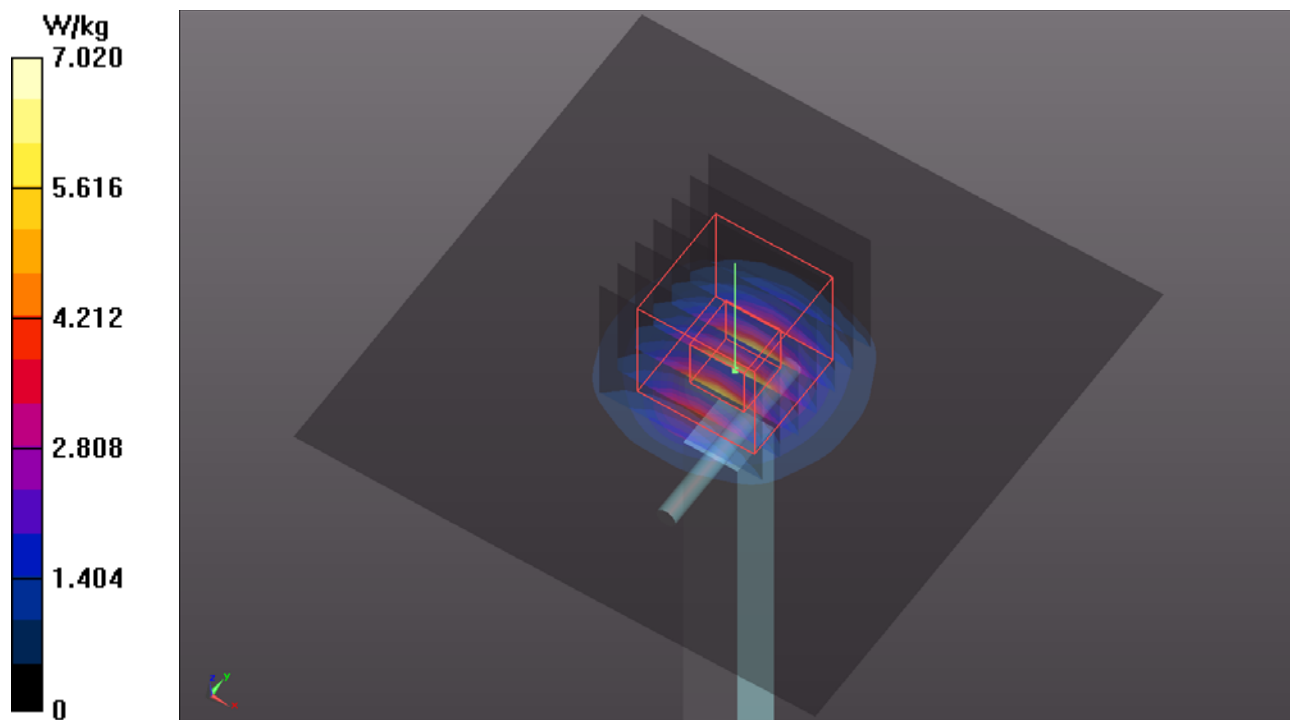
Pin=50mW/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2.5mm

Reference Value = 50.63 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 9.14 W/kg

SAR(1 g) = 3.48 W/kg; SAR(10 g) = 1.31 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 6.78 W/kg



System Check_H5250_200513

DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019

Communication System: UID 0, CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: H34T60N1_0513 Medium parameters used: $f = 5250$ MHz; $\sigma = 4.513$ S/m; $\epsilon_r = 37.007$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(5.36, 5.36, 5.36) @ 5250 MHz; Calibrated: 2019/06/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2019/06/07
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 8.24 W/kg

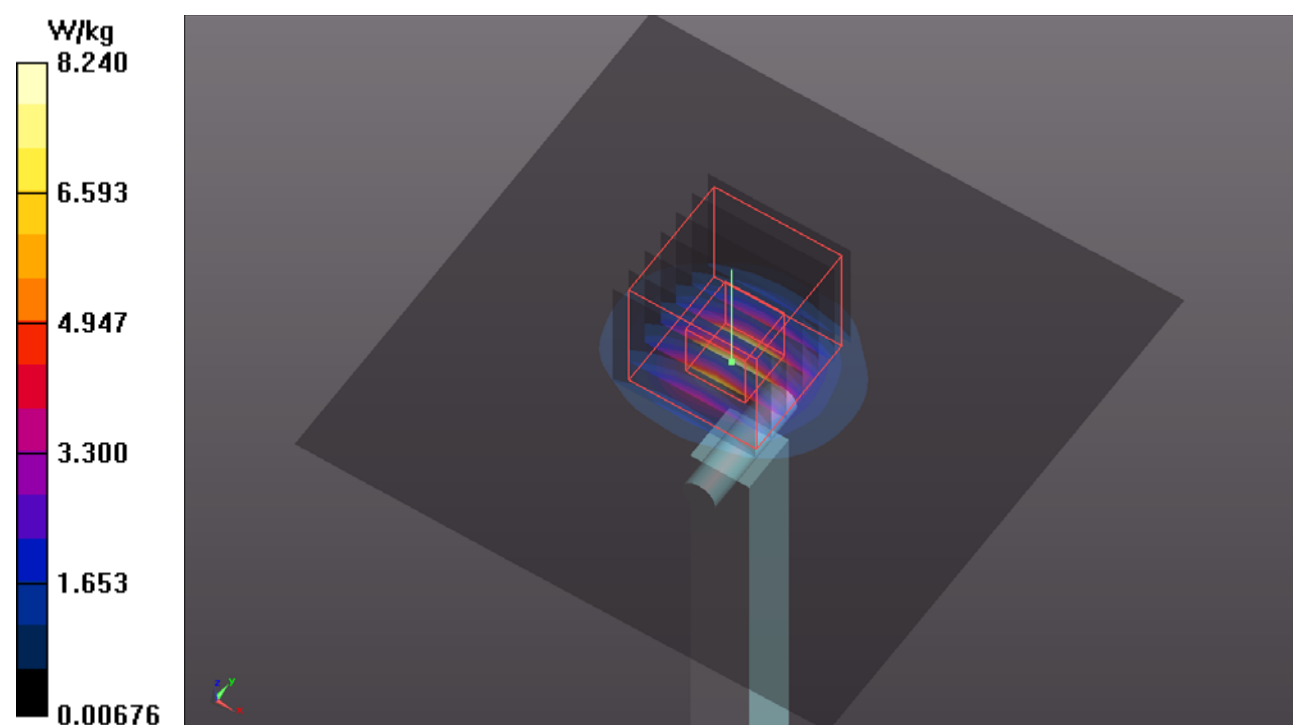
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 47.97 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 14.1 W/kg

SAR(1 g) = 3.61 W/kg; SAR(10 g) = 1.04 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 8.89 W/kg



System Check_H5600_200512

DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019

Communication System: UID 0, CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: H34T60N3_0512 Medium parameters used: $f = 5600$ MHz; $\sigma = 5.159$ S/m; $\epsilon_r = 34.746$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.8 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7472; ConvF(5.1, 5.1, 5.1) @ 5600 MHz; Calibrated: 2019/08/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2019/08/27
- Phantom: ELI Phantom_2105; Type: QD OVA 004 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 9.74 W/kg

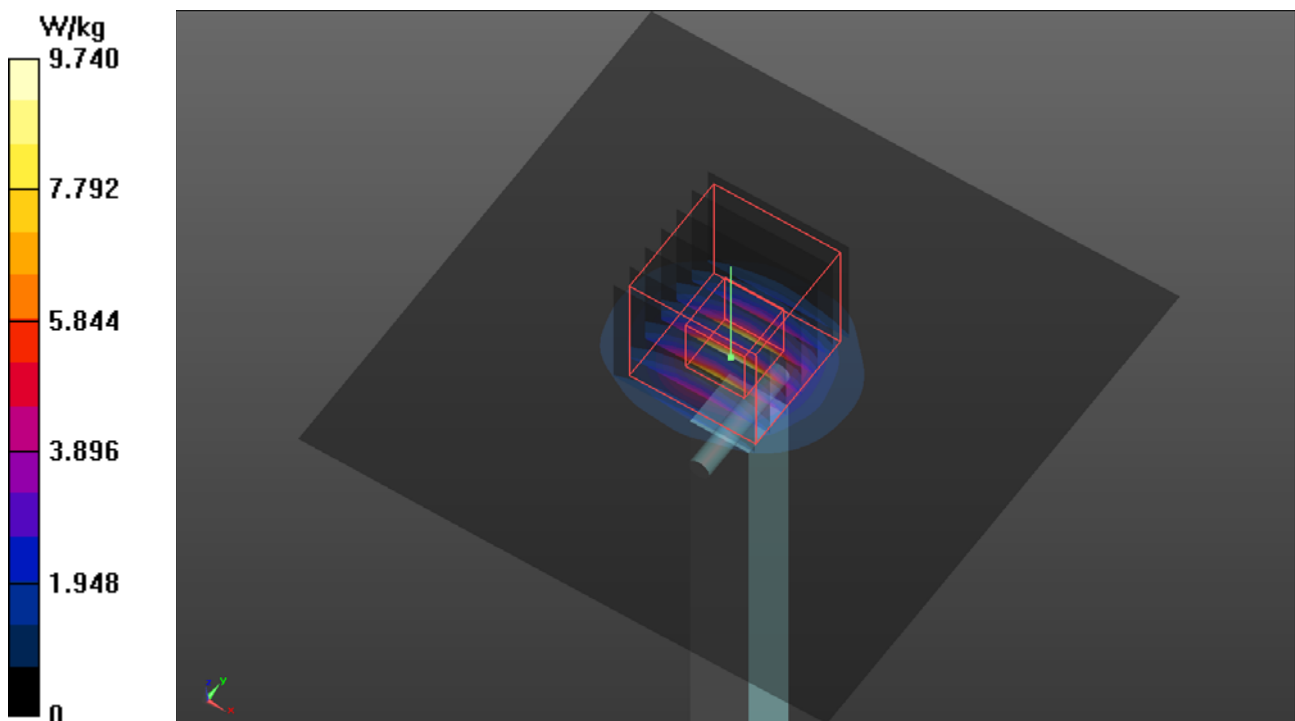
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 47.83 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 17.4 W/kg

SAR(1 g) = 3.97 W/kg; SAR(10 g) = 1.13 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 10.3 W/kg



System Check_H5750_200512

DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019

Communication System: UID 0, CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium: H34T60N3_0512 Medium parameters used: $f = 5750$ MHz; $\sigma = 5.313$ S/m; $\epsilon_r = 34.366$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.8 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7472; ConvF(5.23, 5.23, 5.23) @ 5750 MHz; Calibrated: 2019/08/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2019/08/27
- Phantom: ELI Phantom_2105; Type: QD OVA 004 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 8.77 W/kg

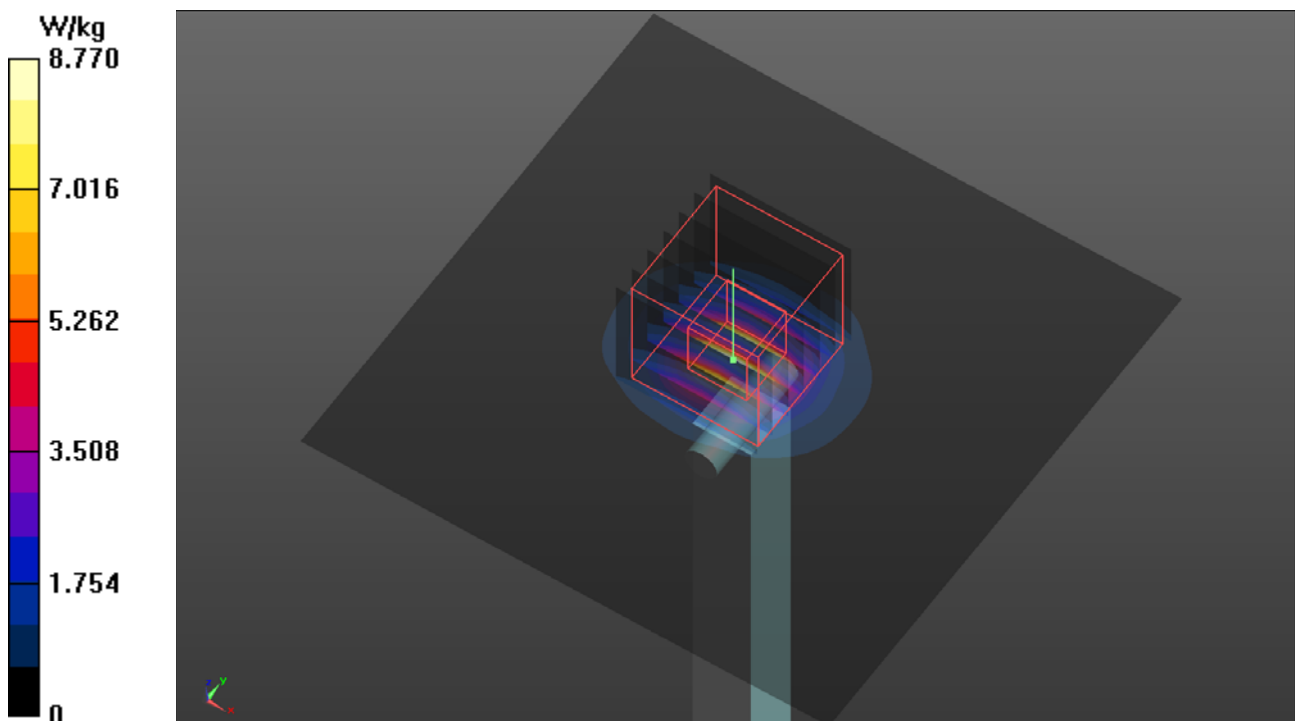
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 45.52 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 16.8 W/kg

SAR(1 g) = 3.7 W/kg; SAR(10 g) = 1.06 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 9.71 W/kg



Appendix B. SAR Plots of SAR Measurement

The SAR plots for highest measured SAR in each exposure configuration, wireless mode and frequency band combination, and measured SAR > 1.5 W/kg are shown as follows.

**P01 WCDMA II_RMC12.2K_Rear Face_0mm_Ch9538_Sample1_Ant
0_P-sensor_w_Battery6cell****DUT: 200417C02**

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 1907.6 MHz; Duty Cycle: 1:1.95

Medium: H16T20N3_0425 Medium parameters used: $f = 1908$ MHz; $\sigma = 1.462$ S/m; $\epsilon_r = 40.43$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.8 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(8.54, 8.54, 8.54) @ 1907.6 MHz; Calibrated: 2020/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2020/01/24
- Phantom: ELI Phantom_1245; Type: QDOVA002AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (51x241x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.575 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 17.94 V/m; Power Drift = -0.02 dB

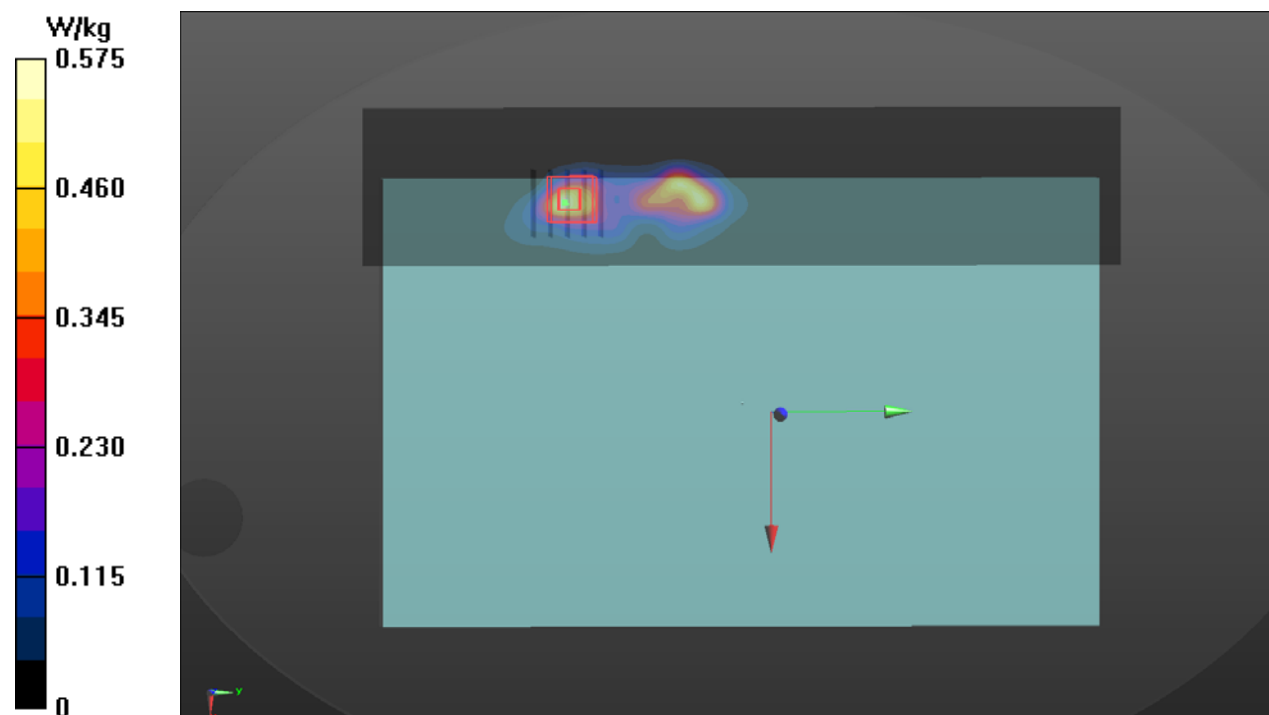
Peak SAR (extrapolated) = 0.780 W/kg

SAR(1 g) = 0.340 W/kg; SAR(10 g) = 0.150 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.2 mm

Ratio of SAR at M2 to SAR at M1 = 45.9%

Maximum value of SAR (measured) = 0.591 W/kg



**P02 WCDMA IV_RMC12.2K_Rear Face_0mm_Ch1312_Sample1_Ant
0_P-sensor_w_Battery6cell****DUT: 200417C02**

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 1712.4 MHz; Duty Cycle: 1:1.95

Medium: H16T20N3_0425 Medium parameters used (interpolated): $f = 1712.4$ MHz; $\sigma = 1.287$ S/m; $\epsilon_r = 41.146$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.8 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(8.73, 8.73, 8.73) @ 1712.4 MHz; Calibrated: 2020/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2020/01/24
- Phantom: ELI Phantom_1245; Type: QDOVA002AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (51x241x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 1.05 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 26.41 V/m; Power Drift = 0.16 dB

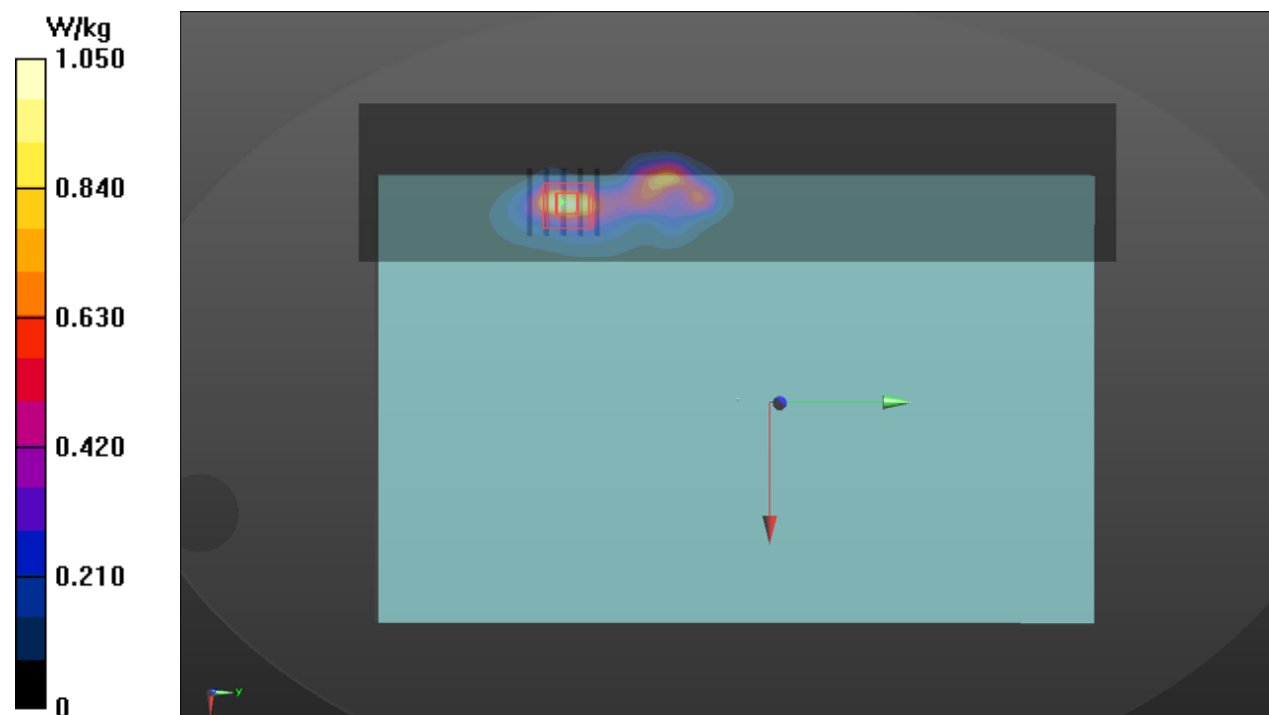
Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 0.645 W/kg; SAR(10 g) = 0.285 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 9.2 mm

Ratio of SAR at M2 to SAR at M1 = 45.1%

Maximum value of SAR (measured) = 1.08 W/kg



P03 WCDMA V_RMC12.2K_Rear
Face_0mm_Ch4132_Sample1_Ant0_P-sensor_w_Battery6cell

DUT: 200417C02

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 826.4 MHz; Duty Cycle: 1:1.95

Medium: H07T10N3_0527 Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.92$ S/m; $\epsilon_r = 42.093$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(9.83, 9.83, 9.83) @ 826.4 MHz; Calibrated: 2019/06/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 2019/06/20
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x241x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.47 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 41.33 V/m; Power Drift = -0.05 dB

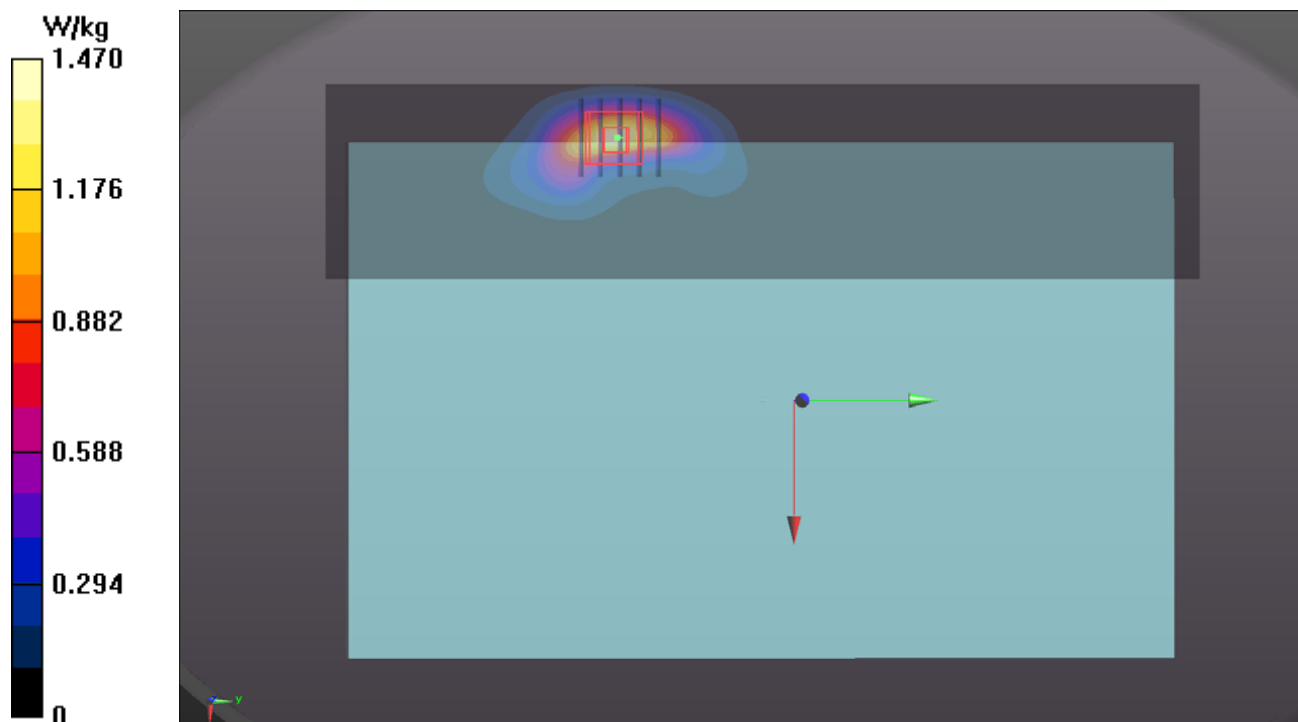
Peak SAR (extrapolated) = 2.16 W/kg

SAR(1 g) = 0.973 W/kg; SAR(10 g) = 0.473 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.6 mm

Ratio of SAR at M2 to SAR at M1 = 47.1%

Maximum value of SAR (measured) = 1.71 W/kg



P04 LTE 2_QPSK20M_Rear Face_0mm_Ch19100_1RB_OS0_Sample1_Ant 0_P-sensor_w_Battery6cell**DUT: 200417C02**

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);

Frequency: 1900 MHz; Duty Cycle: 1:3.74

Medium: H16T20N3_0425 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.454$ S/m; $\epsilon_r = 40.457$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.8 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(8.54, 8.54, 8.54) @ 1900 MHz; Calibrated: 2020/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2020/01/24
- Phantom: ELI Phantom_1245; Type: QDOVA002AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (51x241x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.742 W/kg

Zoom Scan (9x9x8)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 19.09 V/m; Power Drift = -0.12 dB

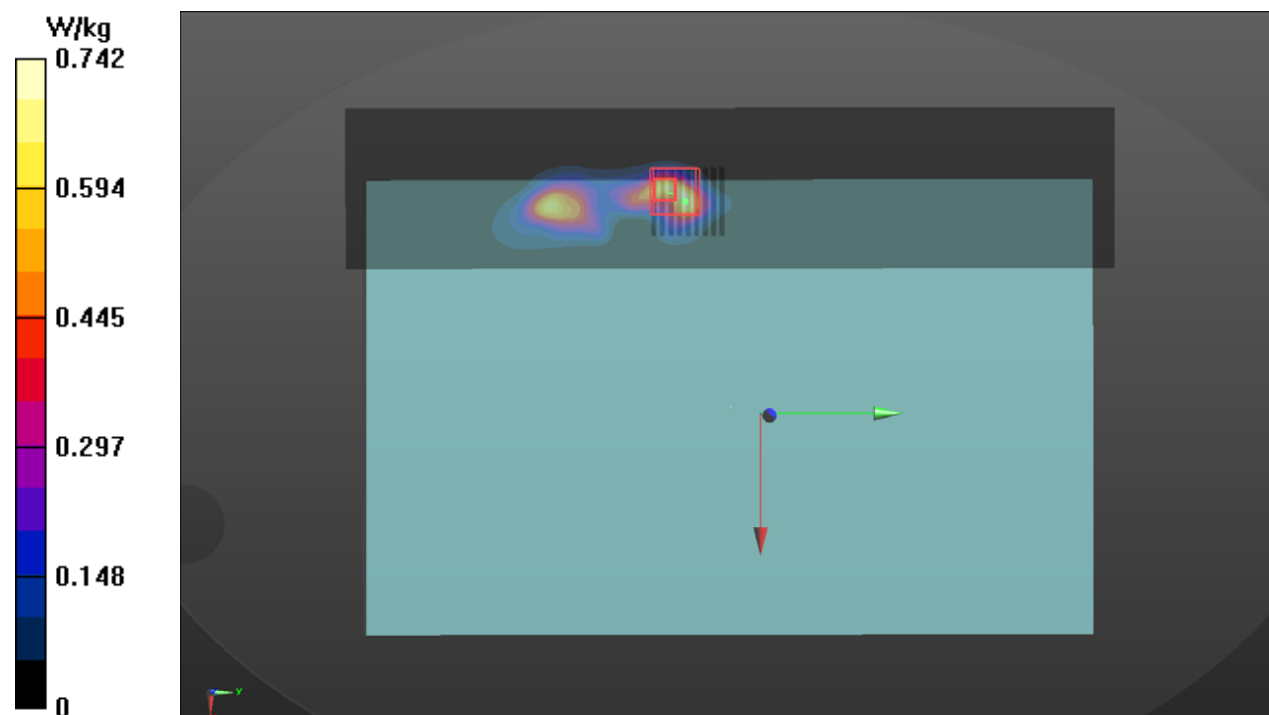
Peak SAR (extrapolated) = 1.49 W/kg

SAR(1 g) = 0.548 W/kg; SAR(10 g) = 0.201 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 5.6 mm

Ratio of SAR at M2 to SAR at M1 = 75.8%

Maximum value of SAR (measured) = 1.09 W/kg



P05 LTE 4_QPSK20M_Rear Face_0mm_Ch20050_1RB_OS0_Sample1_Ant 0_P-sensor_w_Battery6cell**DUT: 200417C02**

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);

Frequency: 1720 MHz; Duty Cycle: 1:3.74

Medium: H16T20N3_0425 Medium parameters used: $f = 1720$ MHz; $\sigma = 1.295$ S/m; $\epsilon_r = 41.112$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.8 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(8.73, 8.73, 8.73) @ 1720 MHz; Calibrated: 2020/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2020/01/24
- Phantom: ELI Phantom_1245; Type: QDOVA002AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (51x241x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 1.02 W/kg

Zoom Scan (9x9x8)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 26.24 V/m; Power Drift = -0.05 dB

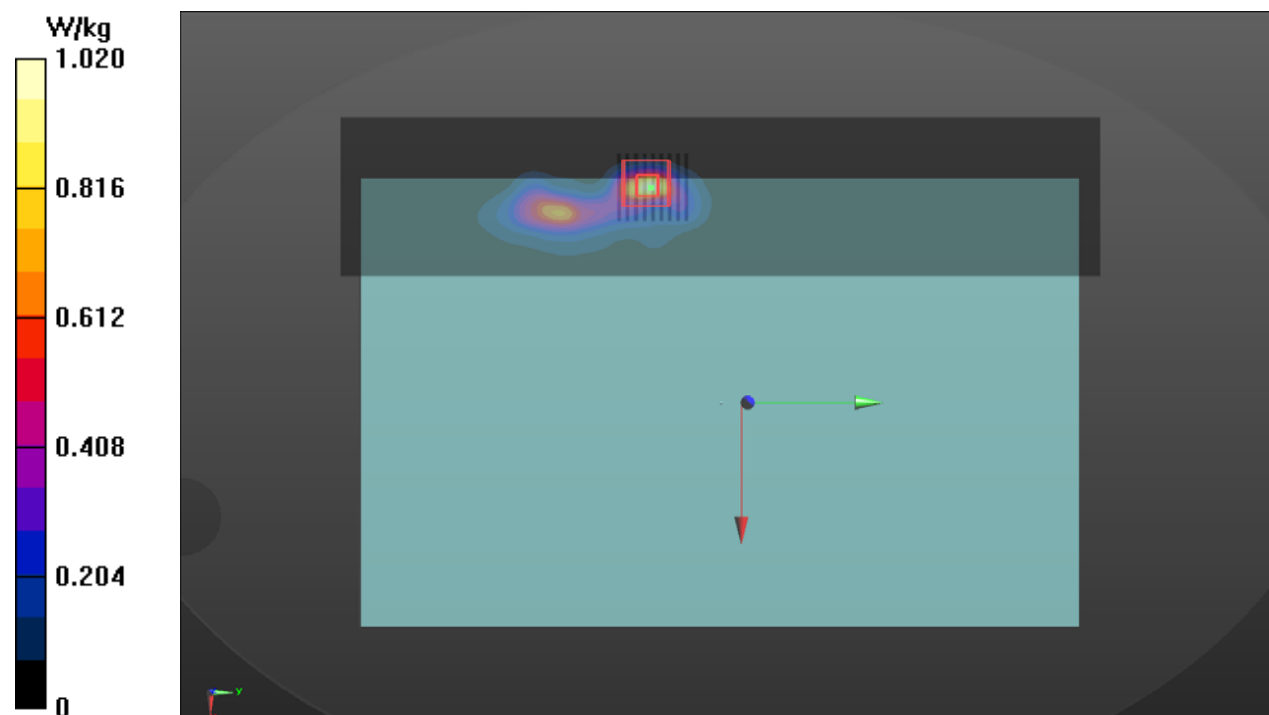
Peak SAR (extrapolated) = 1.50 W/kg

SAR(1 g) = 0.599 W/kg; SAR(10 g) = 0.233 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 5.6 mm

Ratio of SAR at M2 to SAR at M1 = 77.8%

Maximum value of SAR (measured) = 1.12 W/kg



P06 LTE 5_QPSK10M_Rear Face_0mm_Ch20450_1RB_OS0_Sample1_Ant 0_P-sensor_w_Battery6cell**DUT: 200417C02**

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);
Frequency: 829 MHz; Duty Cycle: 1:3.74

Medium: H07T10N4_0424 Medium parameters used: $f = 829$ MHz; $\sigma = 0.895$ S/m; $\epsilon_r = 42.715$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.8 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(10.26, 10.26, 10.26) @ 829 MHz; Calibrated: 2020/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2020/01/24
- Phantom: ELI Phantom_1245; Type: QDOVA002AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (51x241x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.689 W/kg

Zoom Scan (9x9x8)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 26.89 V/m; Power Drift = 0.02 dB

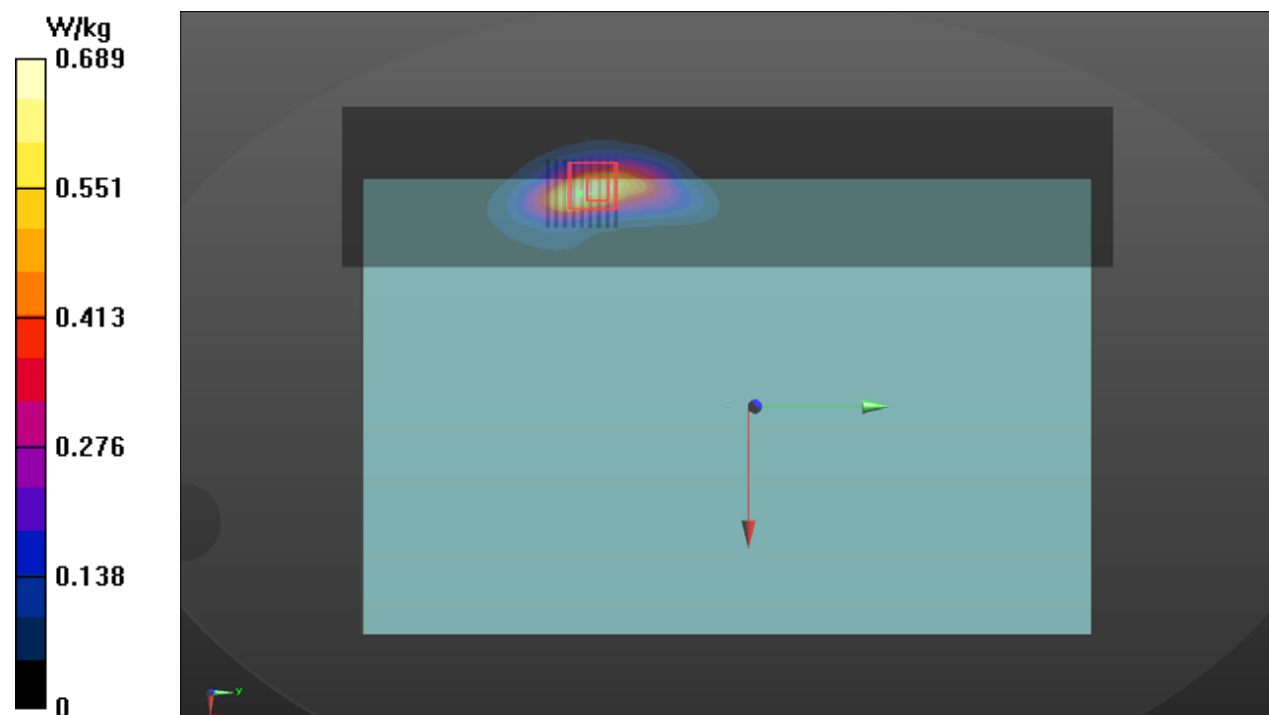
Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 0.562 W/kg; SAR(10 g) = 0.265 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 6.4 mm

Ratio of SAR at M2 to SAR at M1 = 76.8%

Maximum value of SAR (measured) = 0.966 W/kg



P07 LTE 7_QPSK20M_Rear
Face_0mm_Ch21350_1RB_OS0_Sample1_Ant0_P-sensor_w_Battery6cell

DUT: 200417C02

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 2560 MHz; Duty Cycle: 1:3.74

Medium: H19T27N3_0516 Medium parameters used: $f = 2560$ MHz; $\sigma = 1.996$ S/m; $\epsilon_r = 38.729$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.8 °C ; Liquid Temperature : 23.0 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(7.41, 7.41, 7.41) @ 2560 MHz; Calibrated: 2019/06/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 2019/06/20
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x271x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm
Maximum value of SAR (interpolated) = 0.720 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 19.49 V/m; Power Drift = 0.05 dB

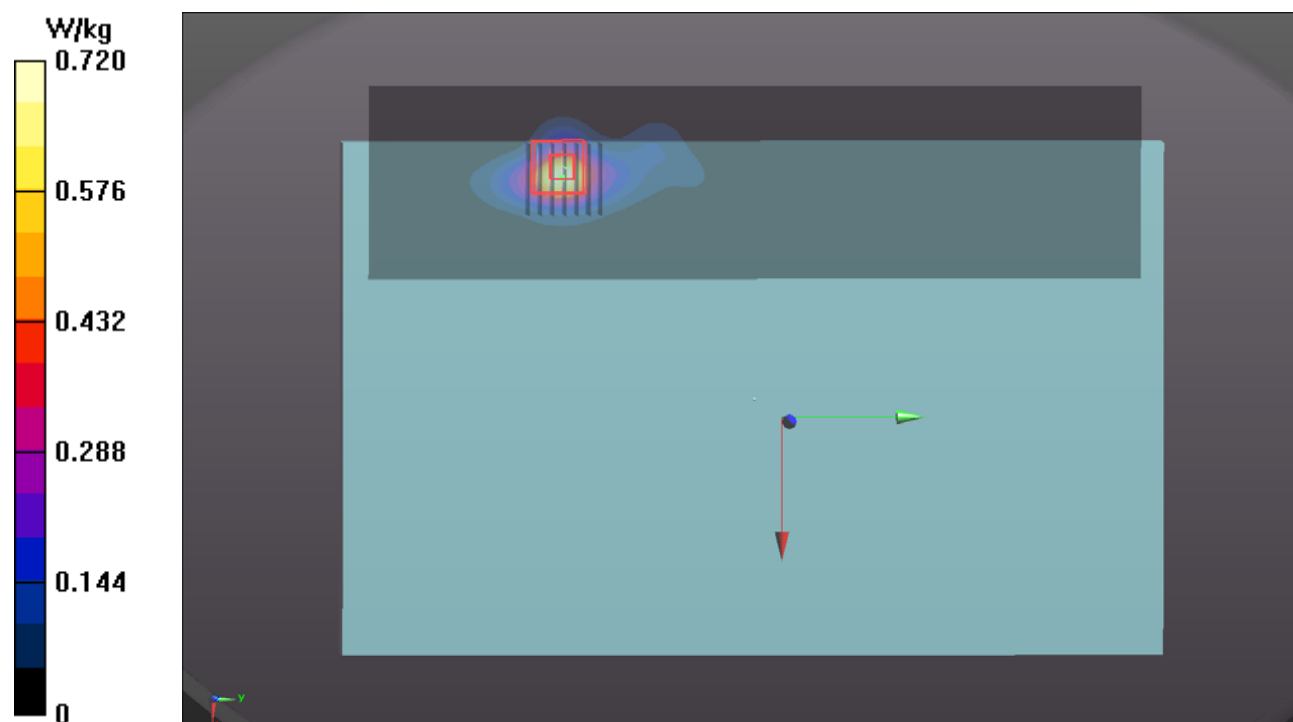
Peak SAR (extrapolated) = 1.67 W/kg

SAR(1 g) = 0.621 W/kg; SAR(10 g) = 0.239 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7 mm

Ratio of SAR at M2 to SAR at M1 = 38.2%

Maximum value of SAR (measured) = 1.23 W/kg



P08 LTE 12_QPSK10M_Rear
Face_0mm_Ch23130_1RB_OS0_Sample1_Ant0_P-sensor_w_Battery6cell

DUT: 200417C02

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);

Frequency: 711 MHz; Duty Cycle: 1:3.74

Medium: H06T09N1_0522 Medium parameters used: $f = 711$ MHz; $\sigma = 0.859$ S/m; $\epsilon_r = 43.215$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(10.19, 10.19, 10.19) @ 711 MHz; Calibrated: 2019/06/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 2019/06/20
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x241x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.986 W/kg

Zoom Scan (7x7x8)/Cube 0: Measurement grid: $dx=6$ mm, $dy=6$ mm, $dz=1.4$ mm

Reference Value = 35.76 V/m; Power Drift = -0.11 dB

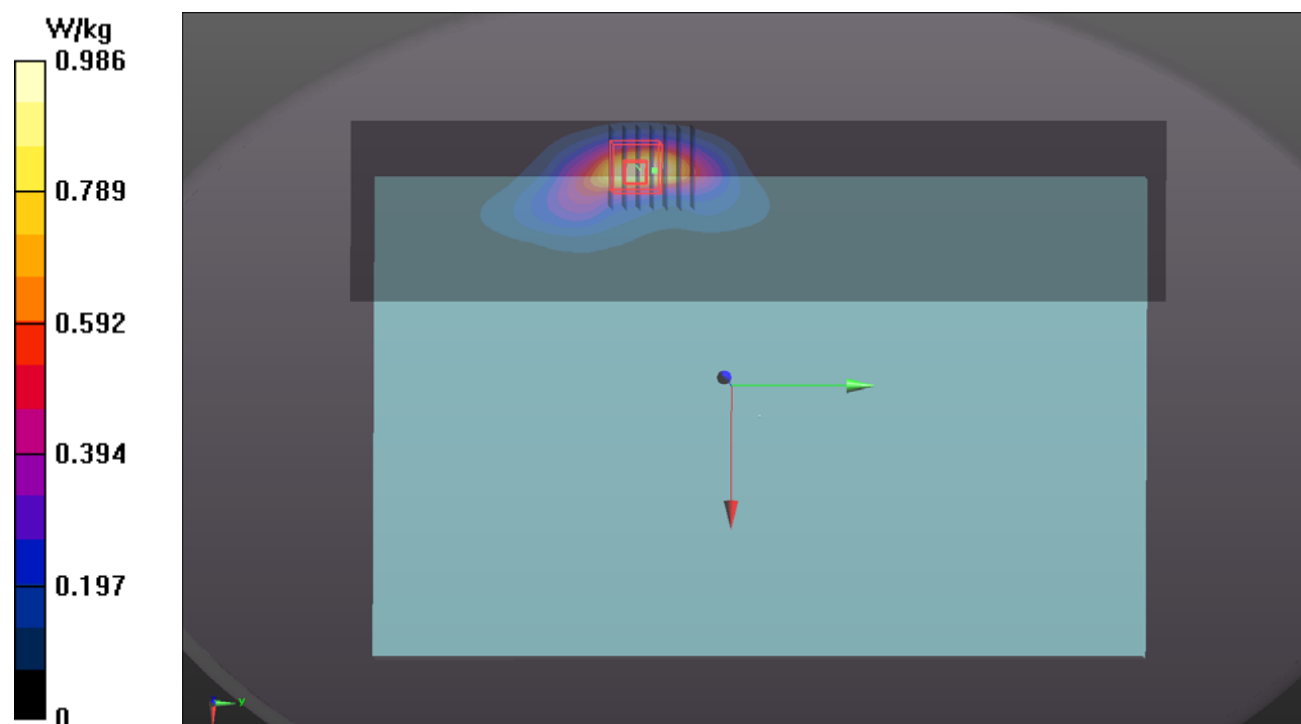
Peak SAR (extrapolated) = 1.63 W/kg

SAR(1 g) = 0.678 W/kg; SAR(10 g) = 0.318 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 43.1%

Maximum value of SAR (measured) = 1.18 W/kg



P09 LTE 13_QPSK10M_Rear
Face_0mm_Ch23230_1RB_OS0_Sample1_Ant0_P-sensor_w_Battery6cell

DUT: 200417C02

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);

Frequency: 782 MHz; Duty Cycle: 1:3.74

Medium: H06T09N1_0530 Medium parameters used: $f = 782$ MHz; $\sigma = 0.922$ S/m; $\epsilon_r = 42.389$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(10.19, 10.19, 10.19) @ 782 MHz; Calibrated: 2019/06/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 2019/06/20
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x241x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.904 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 31.50 V/m; Power Drift = -0.03 dB

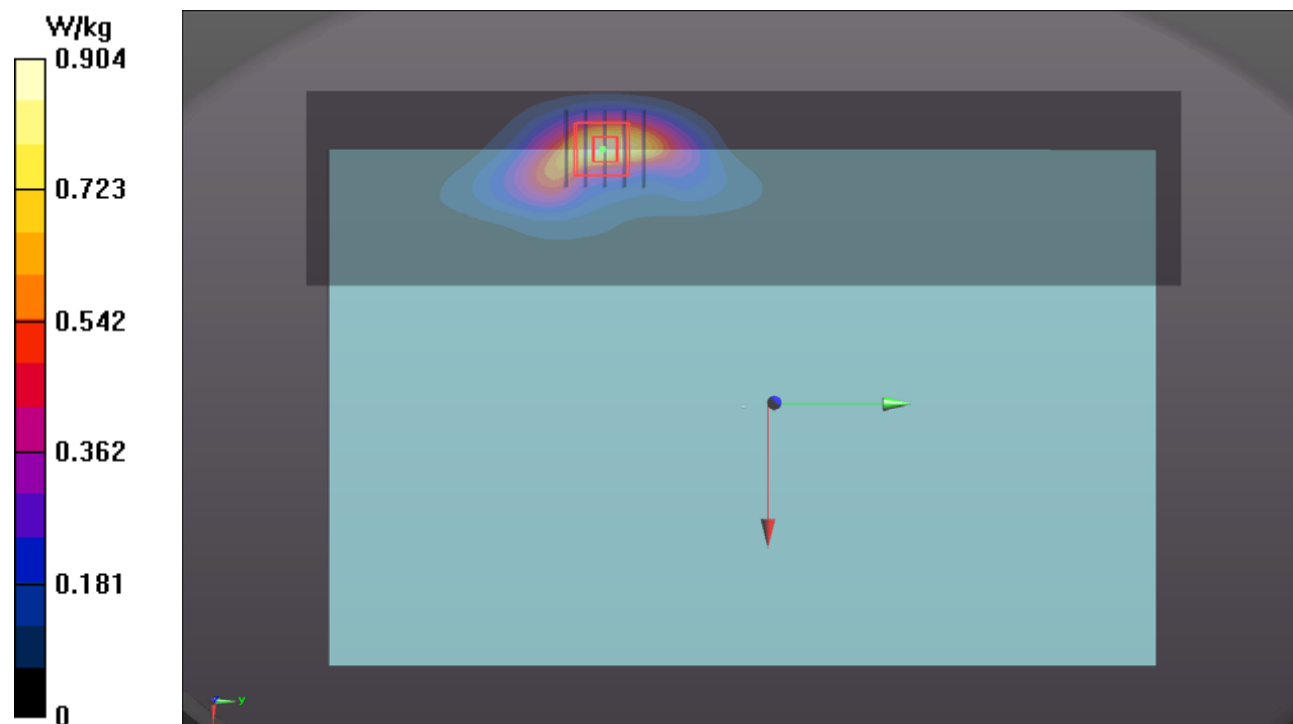
Peak SAR (extrapolated) = 1.54 W/kg

SAR(1 g) = 0.643 W/kg; SAR(10 g) = 0.310 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 10.4 mm

Ratio of SAR at M2 to SAR at M1 = 43.2%

Maximum value of SAR (measured) = 1.23 W/kg



P10 LTE 14_QPSK10M_Rear
Face_0mm_Ch23330_1RB_OS0_Sample1_Ant0_P-sensor_w_Battery6cell

DUT: 200417C02

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);

Frequency: 793 MHz; Duty Cycle: 1:3.74

Medium: H06T09N1_0522 Medium parameters used: $f = 793$ MHz; $\sigma = 0.932$ S/m; $\epsilon_r = 42.205$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(10.19, 10.19, 10.19) @ 793 MHz; Calibrated: 2019/06/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 2019/06/20
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x241x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.67 W/kg

Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=6mm, dy=6mm, dz=1.4mm

Reference Value = 43.81 V/m; Power Drift = -0.10 dB

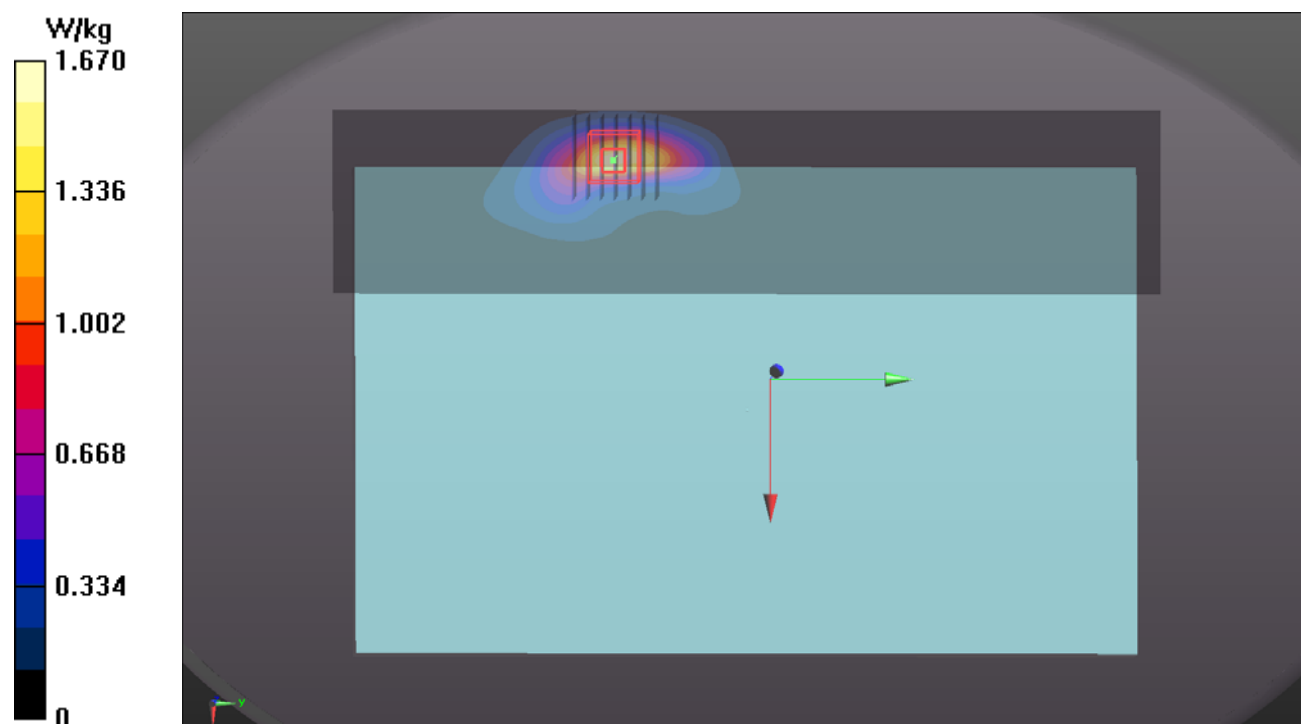
Peak SAR (extrapolated) = 2.52 W/kg

SAR(1 g) = 1.01 W/kg; SAR(10 g) = 0.479 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 43%

Maximum value of SAR (measured) = 1.90 W/kg



P11 LTE 17_QPSK10M_Rear
Face_0mm_Ch23780_1RB_OS0_Sample1_Ant0_P-sensor_w_Battery6cell

DUT: 200417C02

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);

Frequency: 709 MHz; Duty Cycle: 1:3.74

Medium: H06T09N1_0522 Medium parameters used: $f = 709$ MHz; $\sigma = 0.857$ S/m; $\epsilon_r = 43.238$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(10.19, 10.19, 10.19) @ 709 MHz; Calibrated: 2019/06/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 2019/06/20
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x241x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.68 W/kg

Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=6mm, dy=6mm, dz=1.4mm

Reference Value = 45.08 V/m; Power Drift = -0.04 dB

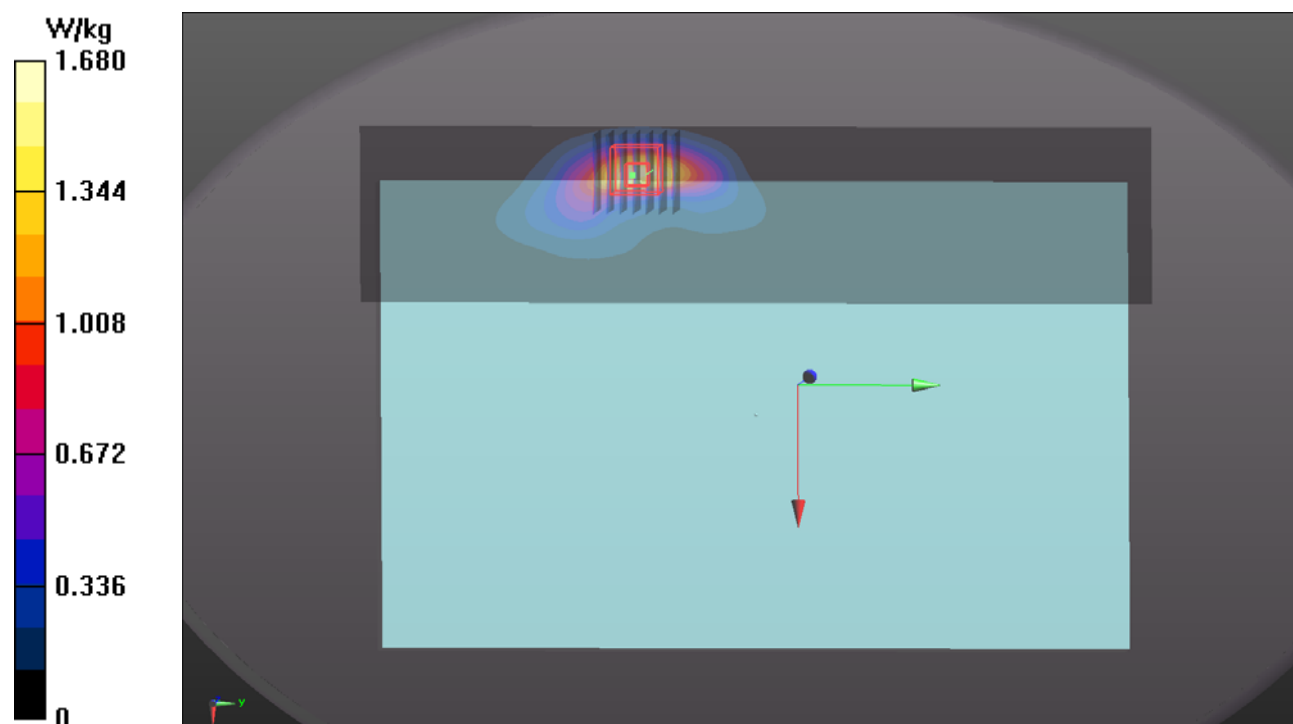
Peak SAR (extrapolated) = 2.53 W/kg

SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.497 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 41.7%

Maximum value of SAR (measured) = 1.86 W/kg



P12 LTE 25_QPSK20M_Rear Face_0mm_Ch26590_1RB_OS0_Sample1_Ant 0_P-sensor_w_Battery6cell**DUT: 200417C02**

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1905 MHz; Duty Cycle: 1:3.74

Medium: H16T20N3_0425 Medium parameters used (interpolated): $f = 1905$ MHz; $\sigma = 1.459$ S/m;
 $\epsilon_r = 40.438$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.8 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(8.54, 8.54, 8.54) @ 1905 MHz; Calibrated: 2020/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2020/01/24
- Phantom: ELI Phantom_1245; Type: QDOVA002AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (51x241x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.662 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 19.30 V/m; Power Drift = -0.17 dB

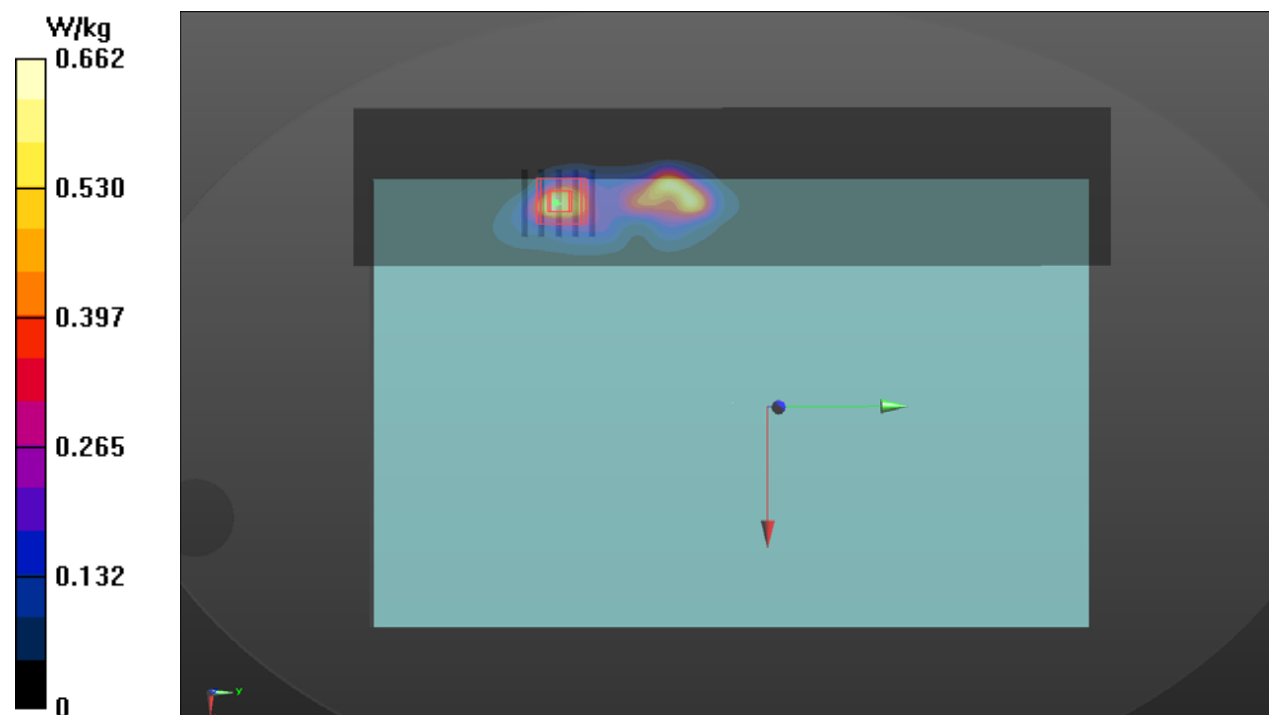
Peak SAR (extrapolated) = 0.890 W/kg

SAR(1 g) = 0.383 W/kg; SAR(10 g) = 0.171 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.6 mm

Ratio of SAR at M2 to SAR at M1 = 45.5%

Maximum value of SAR (measured) = 0.682 W/kg



P13 LTE 26_QPSK15M_Rear Face_0mm_Ch26765_1RB_OS0_Sample1_Ant 0_P-sensor_w_Battery6cell**DUT: 200417C02**

Communication System: UID 10181 - CAE, LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK);

Frequency: 821.5 MHz; Duty Cycle: 1:3.74

Medium: H07T10N4_0424 Medium parameters used (interpolated): $f = 821.5$ MHz; $\sigma = 0.888$ S/m; $\epsilon_r = 42.807$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.8 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(10.26, 10.26, 10.26) @ 821.5 MHz; Calibrated: 2020/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2020/01/24
- Phantom: ELI Phantom_1245; Type: QDOVA002AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (51x241x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.706 W/kg

Zoom Scan (9x9x8)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 27.64 V/m; Power Drift = 0.12 dB

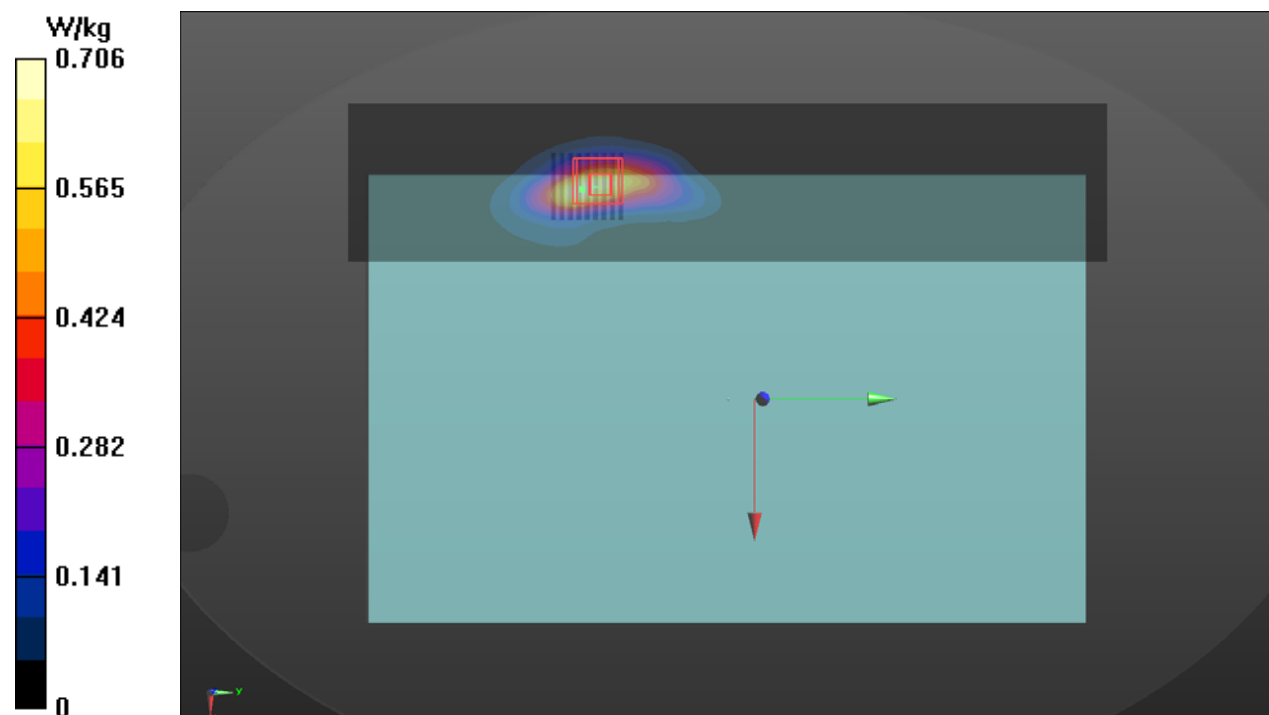
Peak SAR (extrapolated) = 1.35 W/kg

SAR(1 g) = 0.570 W/kg; SAR(10 g) = 0.269 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 5.6 mm

Ratio of SAR at M2 to SAR at M1 = 77%

Maximum value of SAR (measured) = 1.00 W/kg



P14 LTE 30_QPSK10M_Rear
Face_0mm_Ch27710_1RB_OS0_Sample1_Ant0_P-sensor_w_Battery6cell

DUT: 200417C02

Communication System: UID 10175 - CAG, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);

Frequency: 2310 MHz; Duty Cycle: 1:3.74

Medium: H19T27N3_0523 Medium parameters used: $f = 2310$ MHz; $\sigma = 1.731$ S/m; $\epsilon_r = 40.18$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(8.03, 8.03, 8.03) @ 2310 MHz; Calibrated: 2019/06/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 2019/06/20
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x301x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 1.34 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 25.87 V/m; Power Drift = -0.03 dB

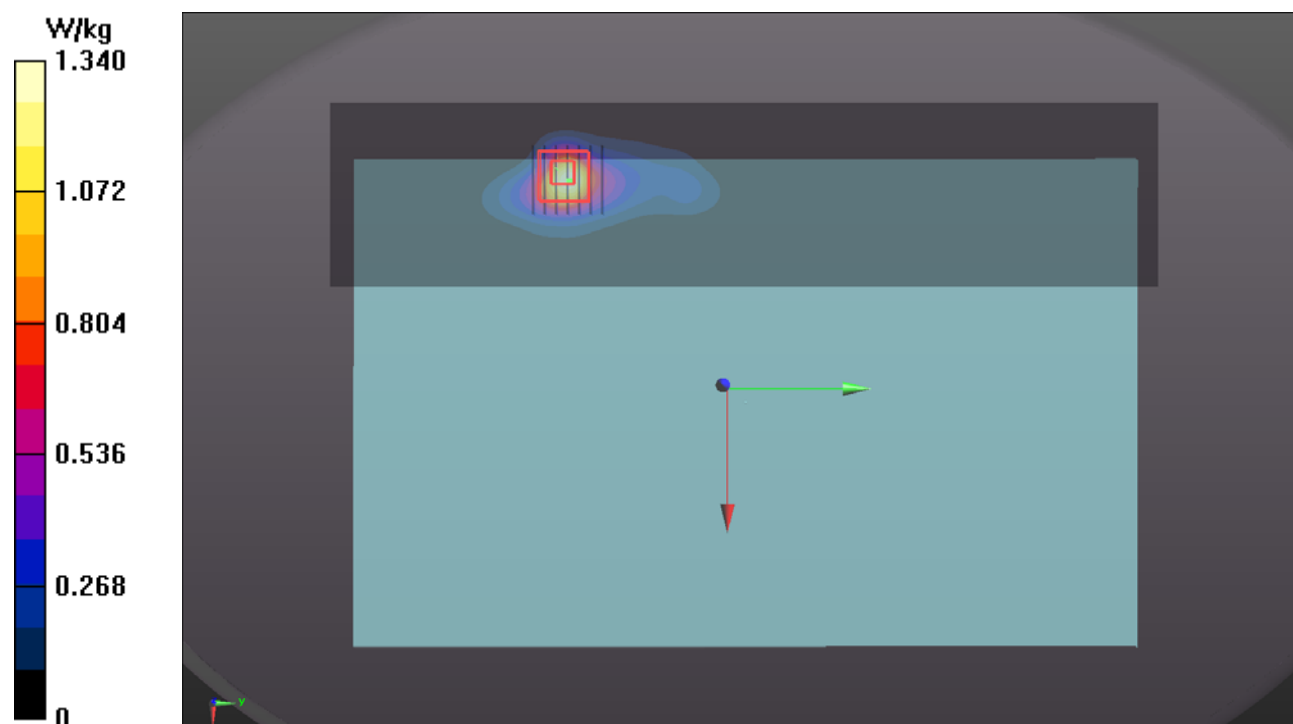
Peak SAR (extrapolated) = 2.69 W/kg

SAR(1 g) = 1.01 W/kg; SAR(10 g) = 0.424 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7.1 mm

Ratio of SAR at M2 to SAR at M1 = 38.2%

Maximum value of SAR (measured) = 1.97 W/kg



P15 LTE 38_QPSK20M_Rear
Face_0mm_Ch38150_1RB_OS0_Sample1_Ant0_P-sensor_w_Battery6cell

DUT: 200417C02

Communication System: UID 10172 - CAG, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 2610 MHz; Duty Cycle: 1:8.33
Medium: H19T27N3_0516 Medium parameters used (interpolated): $f = 2610$ MHz; $\sigma = 2.061$ S/m;
 $\epsilon_r = 38.603$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.8 °C ; Liquid Temperature : 23.0 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(7.41, 7.41, 7.41) @ 2610 MHz; Calibrated: 2019/06/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 2019/06/20
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x271x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm
Maximum value of SAR (interpolated) = 0.697 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 18.81 V/m; Power Drift = 0.06 dB

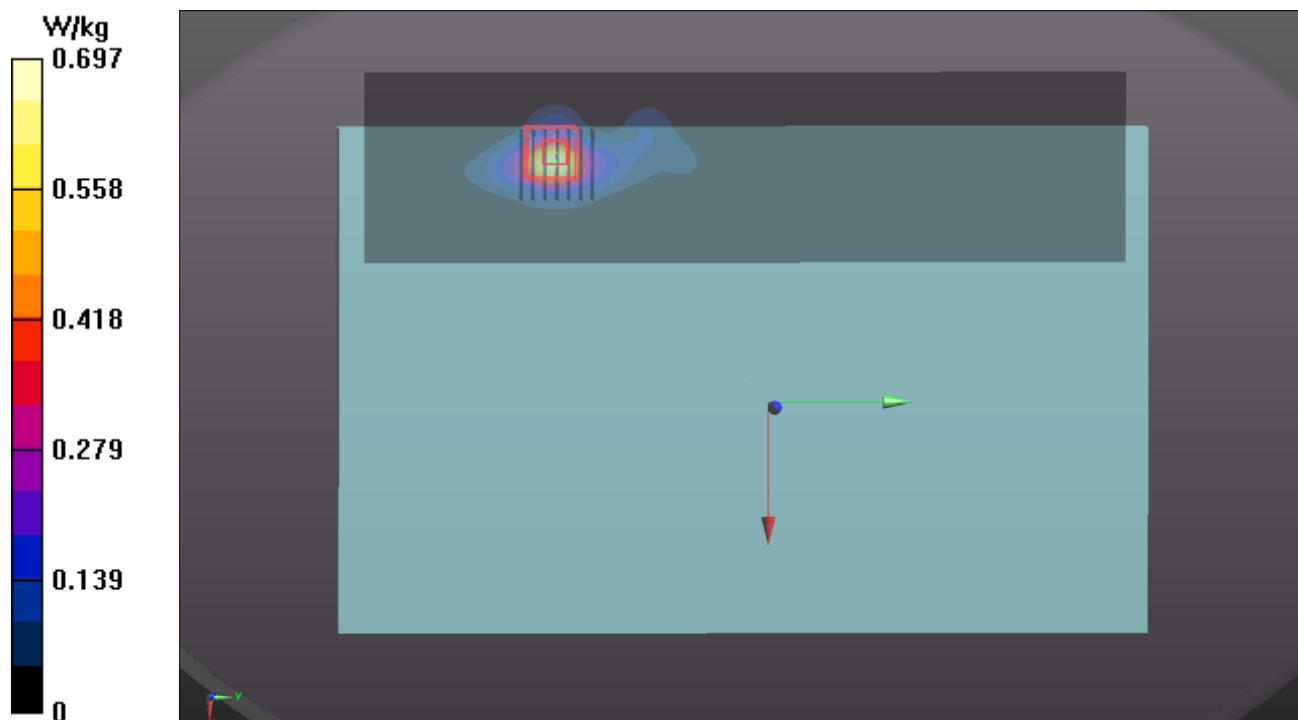
Peak SAR (extrapolated) = 1.62 W/kg

SAR(1 g) = 0.579 W/kg; SAR(10 g) = 0.220 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 6.7 mm

Ratio of SAR at M2 to SAR at M1 = 37.1%

Maximum value of SAR (measured) = 1.18 W/kg



P16 LTE 41_QPSK20M_Rear
Face_0mm_Ch41055_1RB_OS0_Sample1_Ant0_P-sensor_w_Battery6cell

DUT: 200417C02

Communication System: UID 10172 - CAG, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK);

Frequency: 2636.5 MHz; Duty Cycle: 1:8.33

Medium: H19T27N3_0516 Medium parameters used (interpolated): $f = 2636.5$ MHz; $\sigma = 2.078$ S/m;

$\epsilon_r = 38.5$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.8 °C ; Liquid Temperature : 23.0 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(7.41, 7.41, 7.41) @ 2636.5 MHz; Calibrated: 2019/06/27

- Sensor-Surface: 1.4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn914; Calibrated: 2019/06/20

- Phantom: ELI Phantom_1043; Type: QDOVA;

- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x271x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.676 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.52 V/m; Power Drift = 0.06 dB

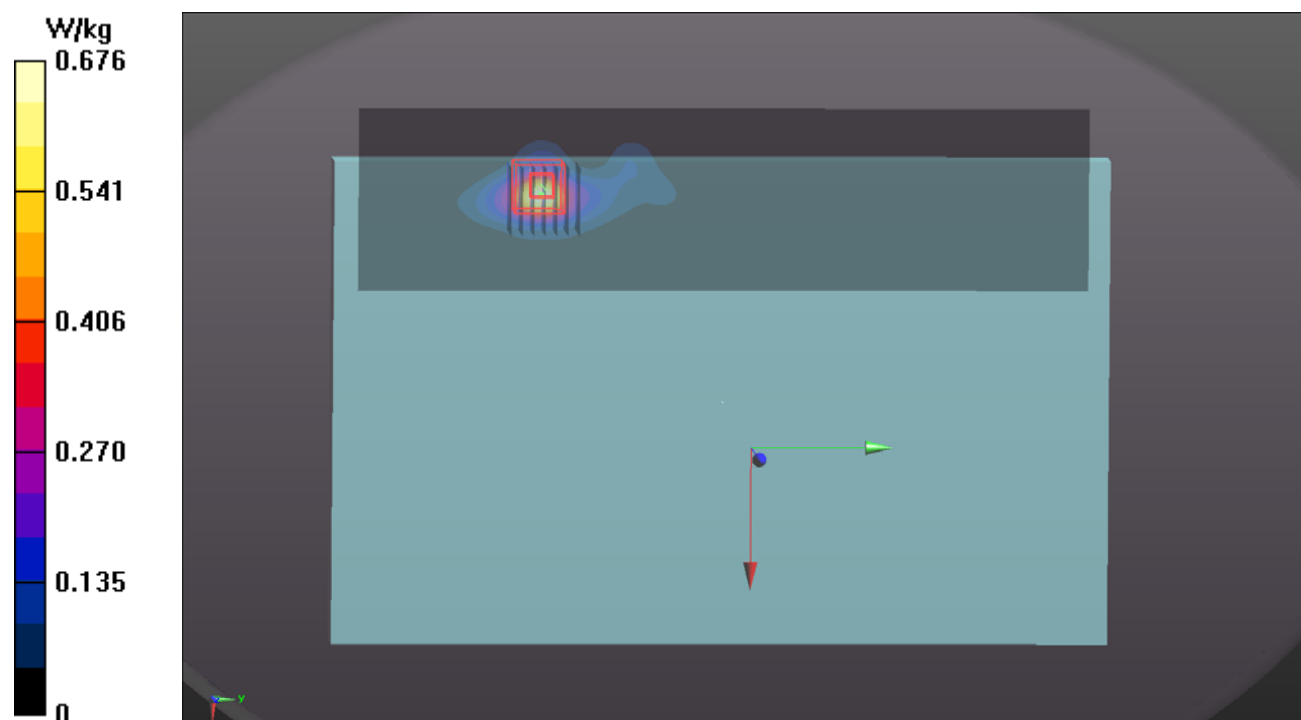
Peak SAR (extrapolated) = 1.54 W/kg

SAR(1 g) = 0.548 W/kg; SAR(10 g) = 0.207 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 6 mm

Ratio of SAR at M2 to SAR at M1 = 37.1%

Maximum value of SAR (measured) = 1.11 W/kg



P17 LTE 42_QPSK20M_Rear
Face_0mm_Ch43340_1RB_OS0_Sample1_Ant1_P-sensor_w_Battery 6cell

DUT: 200417C02

Communication System: UID 10172 - CAG, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK);

Frequency: 3575 MHz; Duty Cycle: 1:8.33

Medium: H34T38N1_0819 Medium parameters used: $f = 3575$ MHz; $\sigma = 3.027$ S/m; $\epsilon_r = 37.185$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3820; ConvF(6.53, 6.53, 6.53) @ 3575 MHz; Calibrated: 2020/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 2020/4/30
- Phantom: ELI Phantom_2105; Type: QD OVA 004 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x271x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 1.29 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=2.5$ mm

Reference Value = 17.47 V/m; Power Drift = -0.03 dB

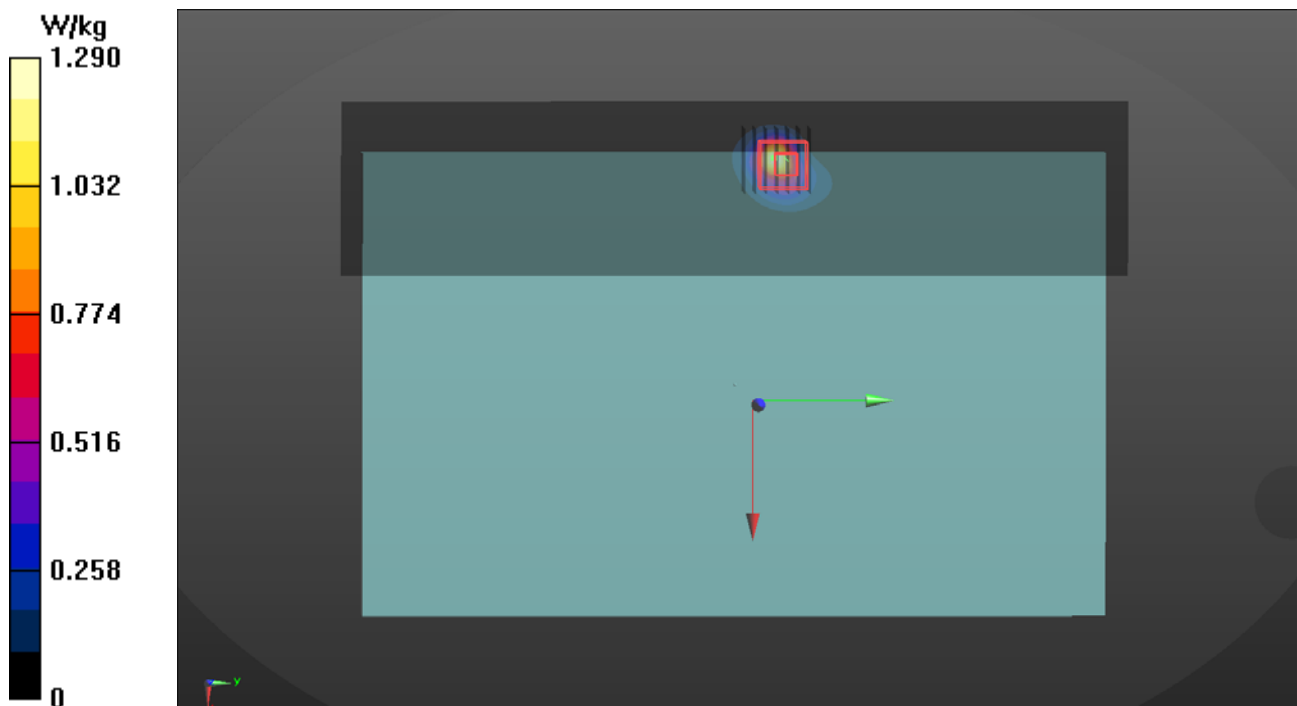
Peak SAR (extrapolated) = 2.49 W/kg

SAR(1 g) = 0.935 W/kg; SAR(10 g) = 0.346 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 6.3 mm

Ratio of SAR at M2 to SAR at M1 = 62.9%

Maximum value of SAR (measured) = 1.68 W/kg



P18 LTE 48_QPSK20M_Rear
Face_0mm_Ch56210_1RB_OS0_Sample1_Ant1_P-sensor_w_Battery6cell

DUT: 200417C02

Communication System: UID 10172 - CAG, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK);

Frequency: 3647 MHz; Duty Cycle: 1:8.33

Medium: H34T38N1_0518 Medium parameters used: $f = 3647$ MHz; $\sigma = 3.003$ S/m; $\epsilon_r = 36.253$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(6.66, 6.66, 6.66) @ 3647 MHz; Calibrated: 2020/03/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1431; Calibrated: 2020/03/18
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x301x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 1.02 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=2.5$ mm

Reference Value = 13.52 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 1.84 W/kg

SAR(1 g) = 0.611 W/kg; SAR(10 g) = 0.216 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7 mm

Ratio of SAR at M2 to SAR at M1 = 56.6%

Maximum value of SAR (measured) = 1.26 W/kg



P19 LTE 66_QPSK20M_Rear
Face_0mm_Ch132322_1RB_OS0_Sample1_Ant1_P-sensor_w_Battery6cell

DUT: 200417C02

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1745 MHz; Duty Cycle: 1:3.74
Medium: H16T20N1_0531 Medium parameters used (interpolated): $f = 1745$ MHz; $\sigma = 1.323$ S/m;
 $\epsilon_r = 40.146$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(8.72, 8.72, 8.72) @ 1745 MHz; Calibrated: 2019/06/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 2019/06/20
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x221x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm
Maximum value of SAR (interpolated) = 0.680 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 19.51 V/m; Power Drift = 0.09 dB

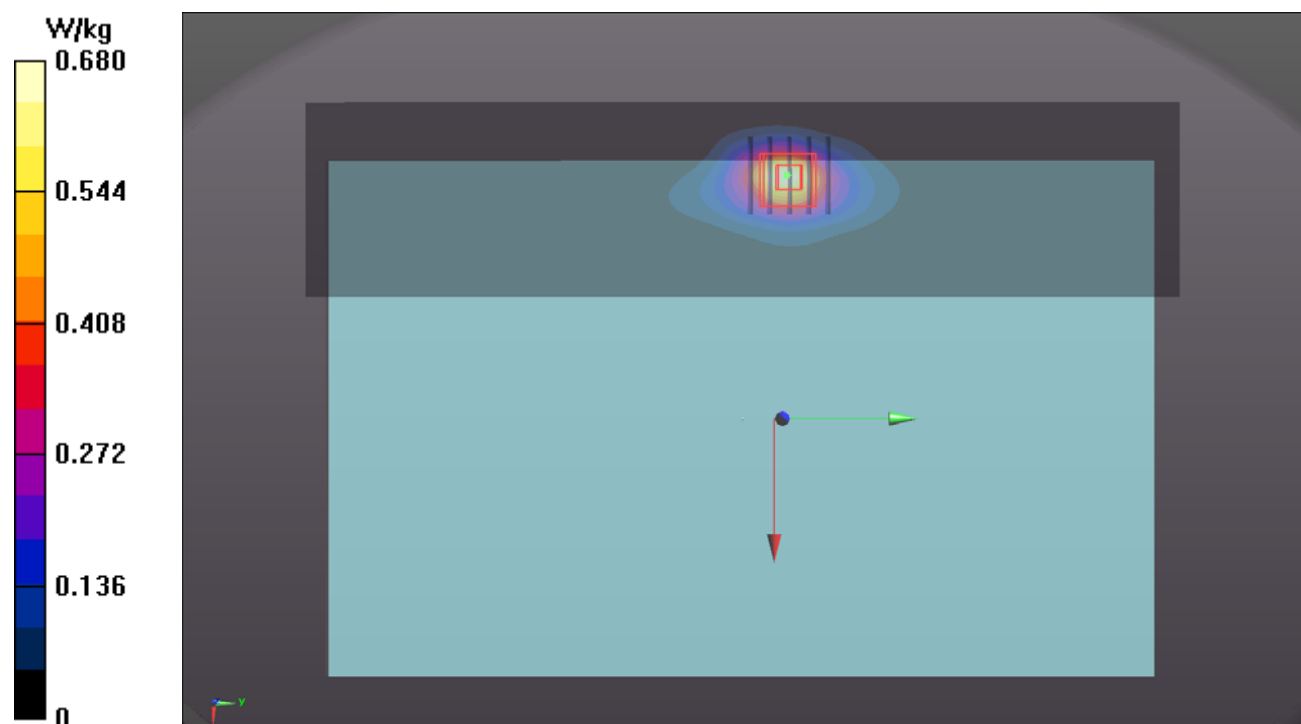
Peak SAR (extrapolated) = 1.50 W/kg

SAR(1 g) = 0.708 W/kg; SAR(10 g) = 0.309 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 49.6%

Maximum value of SAR (measured) = 1.16 W/kg



P20 LTE 71_QPSK20M_Rear
Face_0mm_Ch133222_1RB_OS0_Sample1_Ant0_P-sensor_w_Battery6cell

DUT: 200417C02

Communication System: UID 10169 - CAE, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);

Frequency: 673 MHz; Duty Cycle: 1:3.74

Medium: H06T10N1_0516 Medium parameters used: $f = 673$ MHz; $\sigma = 0.875$ S/m; $\epsilon_r = 42.667$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.8 °C ; Liquid Temperature : 23.0 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(10.19, 10.19, 10.19) @ 673 MHz; Calibrated: 2019/06/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 2019/06/20
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x221x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.819 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 28.17 V/m; Power Drift = 0.03 dB

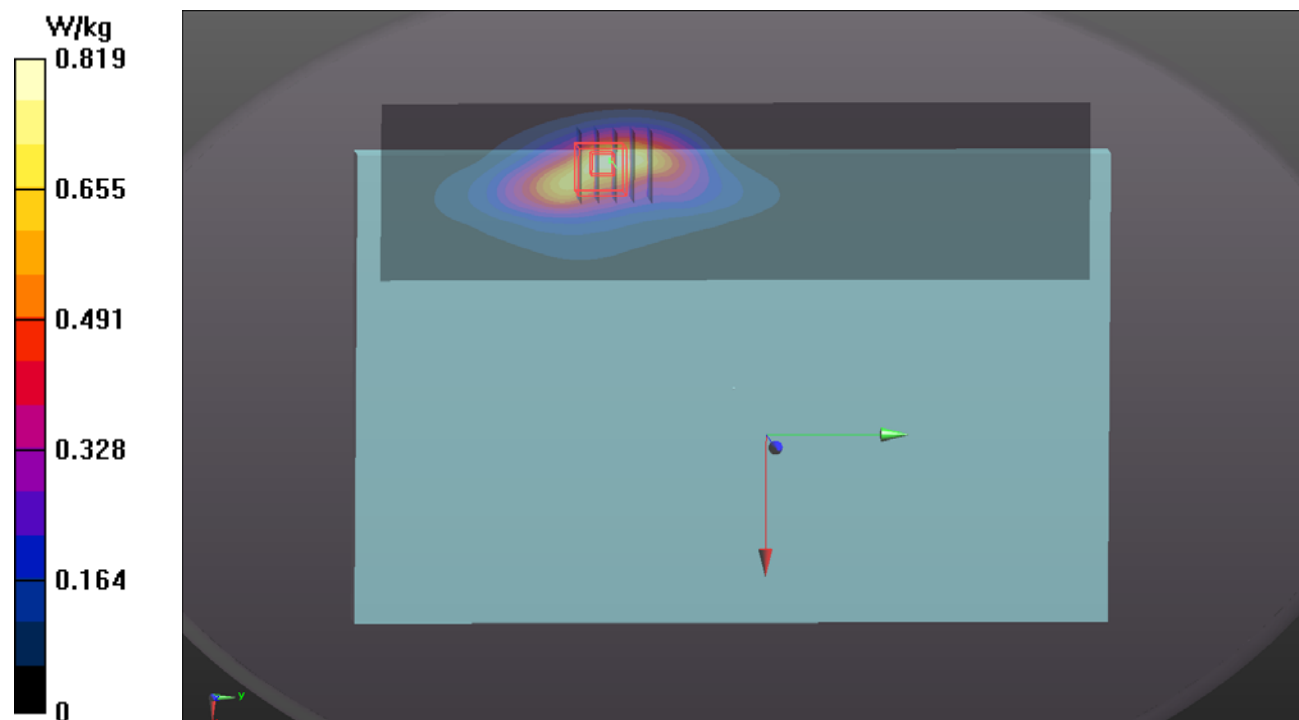
Peak SAR (extrapolated) = 1.55 W/kg

SAR(1 g) = 0.599 W/kg; SAR(10 g) = 0.297 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.2 mm

Ratio of SAR at M2 to SAR at M1 = 37.2%

Maximum value of SAR (measured) = 1.16 W/kg



**P21 5G NR-n2_DFT-S-15KHz_QPSK20M_Rear
Face_0mm_Ch376000_50RB_OS0_Sample1_Ant0_P-sensor_w_Battery6Cell****DUT: 200417C02**

Communication System: UID 0, CW; Frequency: 1880 MHz; Duty Cycle: 1:3.82

Medium: H16T20N1_0525 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.443$ S/m; $\epsilon_r = 38.835$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(8.54, 8.54, 8.54) @ 1880 MHz; Calibrated: 2020/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2020/01/24
- Phantom: ELI Phantom_1204; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x241x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.791 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.53 V/m; Power Drift = -0.08 dB

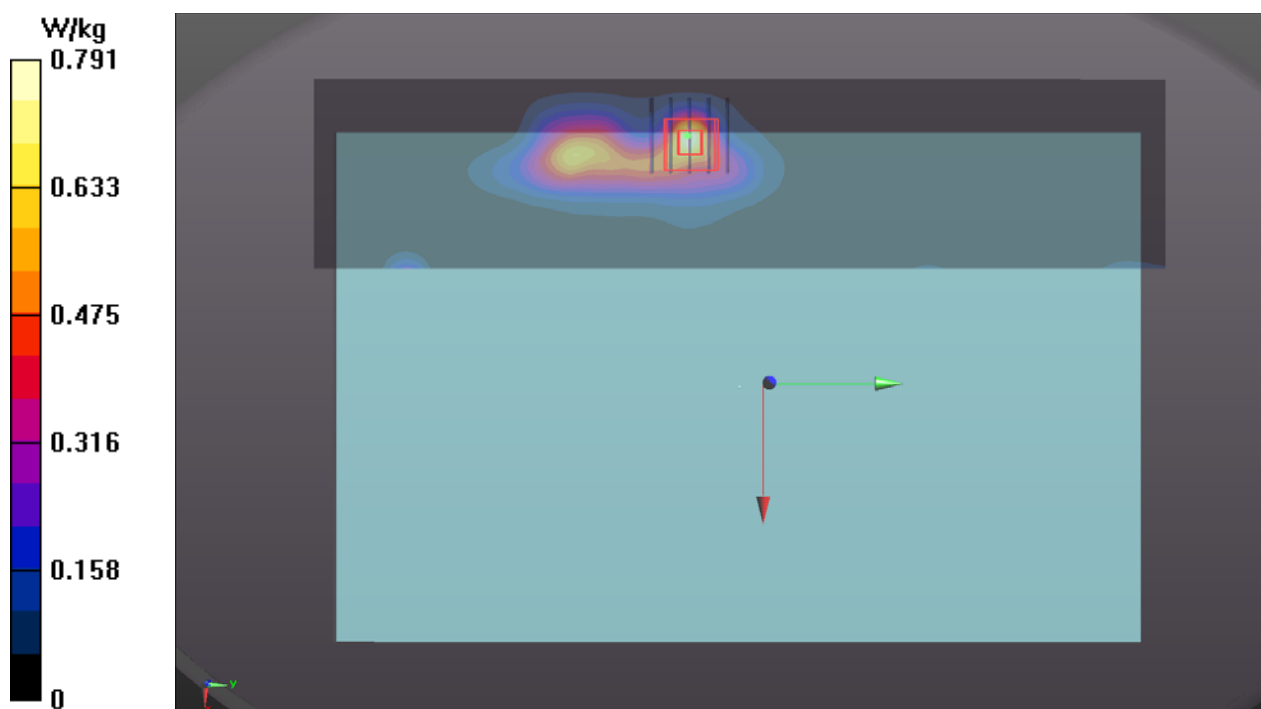
Peak SAR (extrapolated) = 1.61 W/kg

SAR(1 g) = 0.723 W/kg; SAR(10 g) = 0.315 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.8 mm

Ratio of SAR at M2 to SAR at M1 = 52%

Maximum value of SAR (measured) = 1.21 W/kg



**P22 5G NR-n5_DFT-S-15KHz_QPSK20M_Rear
Face_0mm_Ch167800_1RB_OS1_Sample1_Ant0_P-sensor_w_Battery6Cell****DUT: 200417C02**

Communication System: UID 0, CW ; Frequency: 839 MHz; Duty Cycle: 1:3.56

Medium: H07T10N1_0529 Medium parameters used: $f = 839$ MHz; $\sigma = 0.931$ S/m; $\epsilon_r = 42.465$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7472; ConvF(10.18, 10.18, 10.18) @ 839 MHz; Calibrated: 2019/08/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2019/08/27
- Phantom: ELI Phantom_2105; Type: QD OVA 004 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x221x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.683 W/kg

Zoom Scan (9x9x8)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 23.43 V/m; Power Drift = -0.05 dB

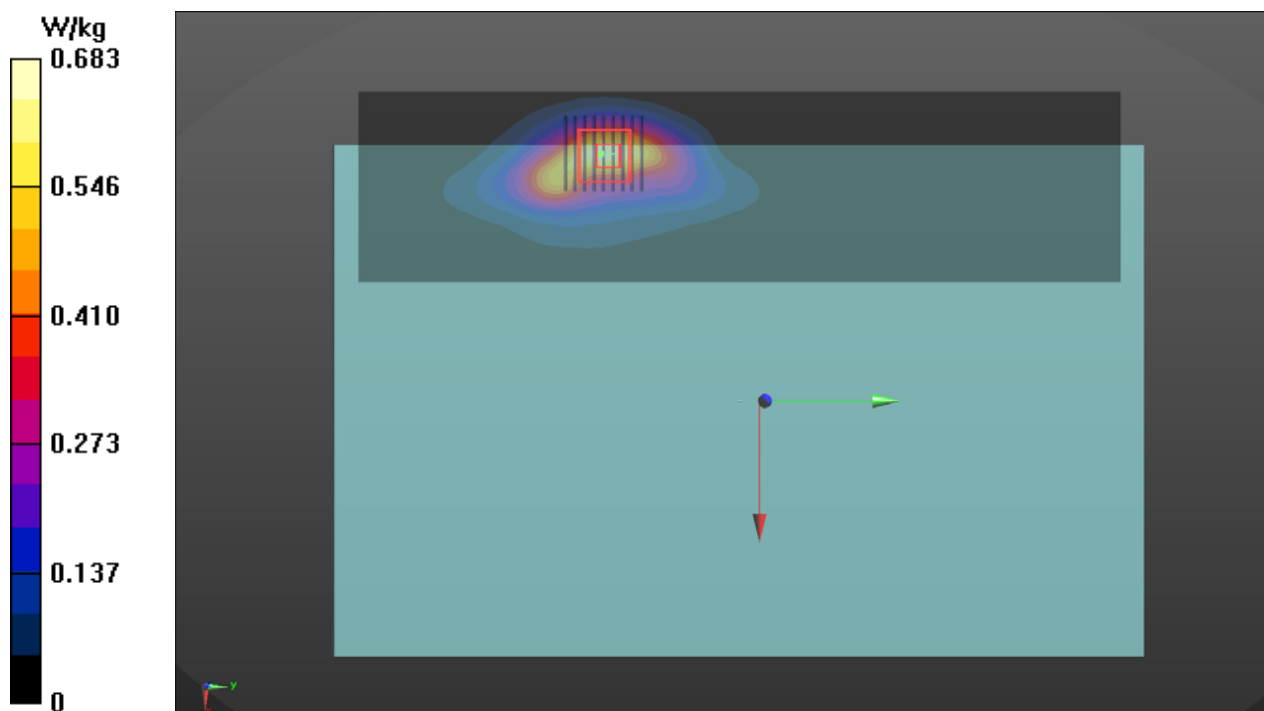
Peak SAR (extrapolated) = 1.65 W/kg

SAR(1 g) = 0.609 W/kg; SAR(10 g) = 0.288 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 5.8 mm

Ratio of SAR at M2 to SAR at M1 = 76.3%

Maximum value of SAR (measured) = 1.10 W/kg



**P23 5G NR-n7_DFT-S-15KHz_QPSK20M_Rear
Face_0mm_Ch502000_1RB_OS1_Sample1_Ant1_P-sensor_w_Battery6Cell****DUT: 200417C02**

Communication System: UID 0, CW; Frequency: 2510 MHz; Duty Cycle: 1:3.56

Medium: H19T27N3_0525 Medium parameters used: $f = 2510$ MHz; $\sigma = 1.945$ S/m; $\epsilon_r = 38.149$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(7.71, 7.71, 7.71) @ 2510 MHz; Calibrated: 2020/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2020/01/24
- Phantom: ELI Phantom_1204; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x301x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 0.541 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 13.87 V/m; Power Drift = -0.04 dB

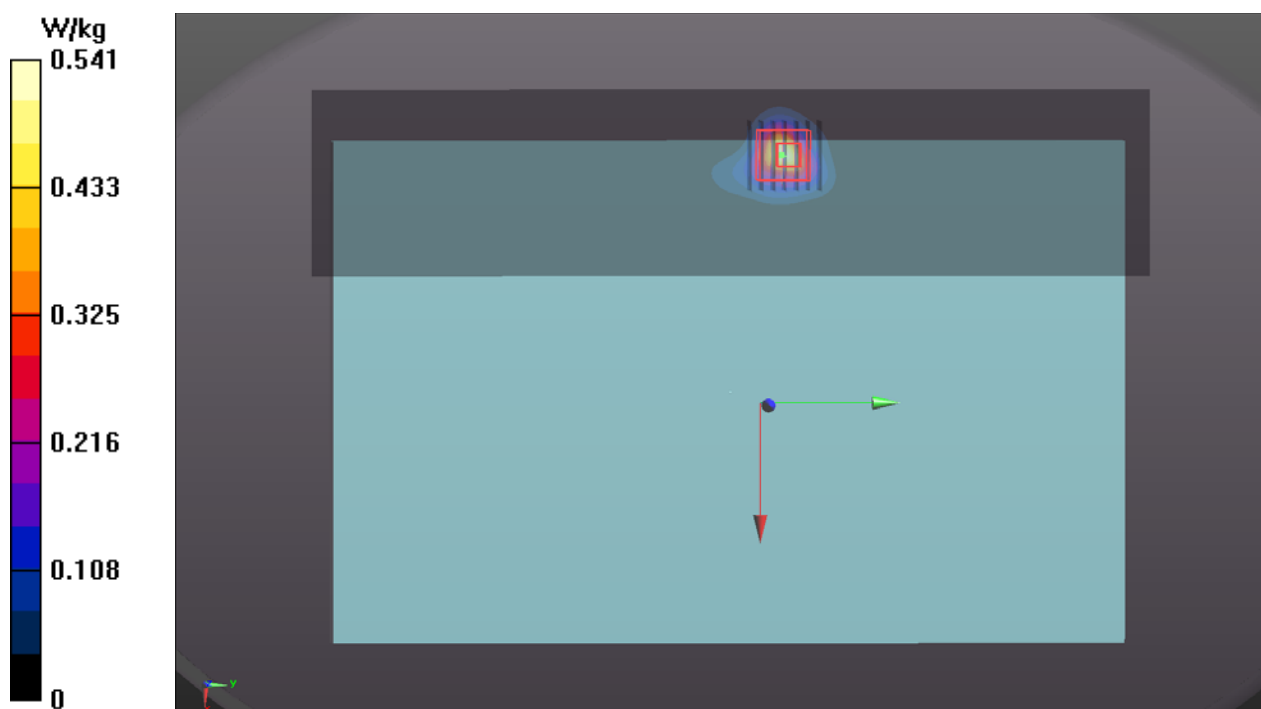
Peak SAR (extrapolated) = 1.38 W/kg

SAR(1 g) = 0.413 W/kg; SAR(10 g) = 0.135 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 6.3 mm

Ratio of SAR at M2 to SAR at M1 = 42.8%

Maximum value of SAR (measured) = 0.773 W/kg



**P24 5G NR-n12_DFT-S-15KHz_QPSK15M_Rear
Face_0mm_Ch141500_1RB_OS1_Sample1_Ant0_P-sensor_w_Battery6Cell****DUT: 200417C02**

Communication System: UID 0, CW; Frequency: 707.5 MHz; Duty Cycle: 1:3.56

Medium: H06T09N1_0529 Medium parameters used (interpolated): $f = 707.5$ MHz; $\sigma = 0.848$ S/m;
 $\epsilon_r = 44.025$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7472; ConvF(10.49, 10.49, 10.49) @ 707.5 MHz; Calibrated: 2019/08/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2019/08/27
- Phantom: ELI Phantom_2105; Type: QD OVA 004 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x221x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.655 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 25.84 V/m; Power Drift = -0.05 dB

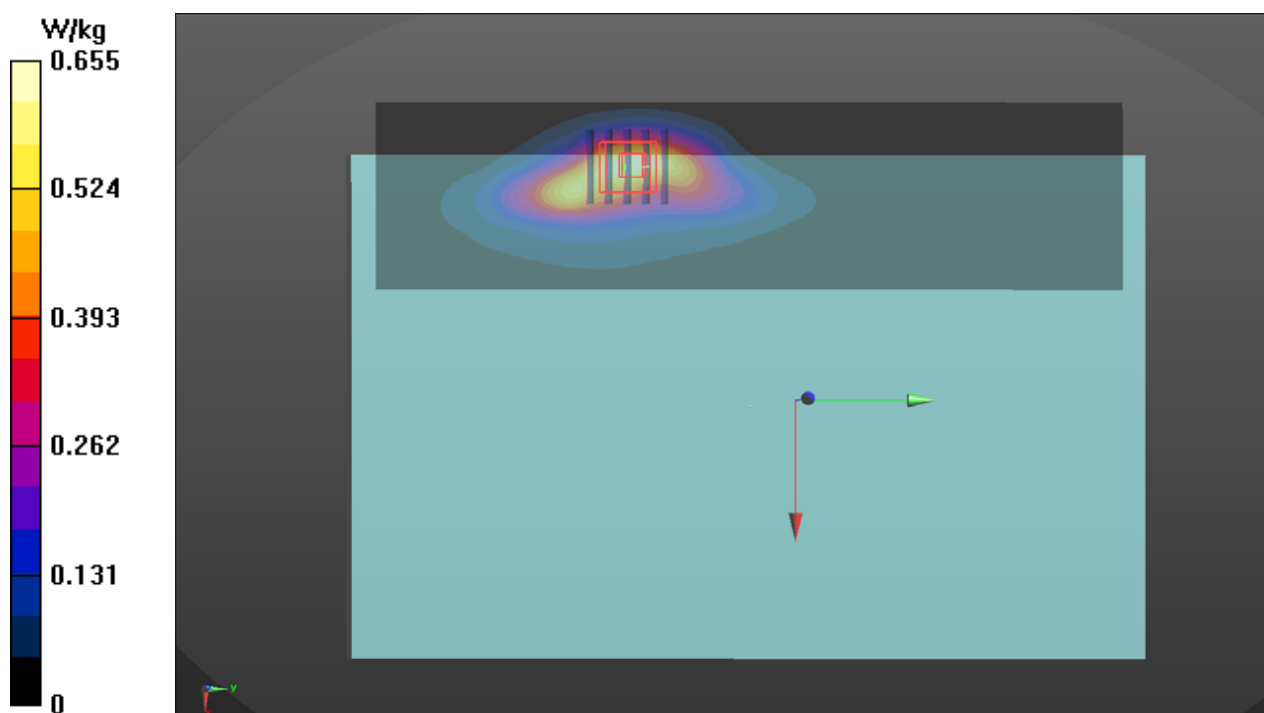
Peak SAR (extrapolated) = 1.60 W/kg

SAR(1 g) = 0.659 W/kg; SAR(10 g) = 0.308 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.4 mm

Ratio of SAR at M2 to SAR at M1 = 39.1%

Maximum value of SAR (measured) = 1.24 W/kg



**P25 5G NR-n41_DFT-S-30KHz_QPSK100M_Rear
Face_0mm_Ch528000_135RB_OS0_Sample1_Ant1_P-sensor_w_Battery6Cell****DUT: 200417C02**

Communication System: UID 0, CW; Frequency: 2640 MHz; Duty Cycle: 1:3.93

Medium: H19T27N1_0528 Medium parameters used: $f = 2640$ MHz; $\sigma = 2.073$ S/m; $\epsilon_r = 37.281$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.7 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7472; ConvF(7.64, 7.64, 7.64) @ 2640 MHz; Calibrated: 2019/08/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2019/08/27
- Phantom: ELI Phantom_2105; Type: QD OVA 004 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x301x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 0.541 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 12.58 V/m; Power Drift = -0.04 dB

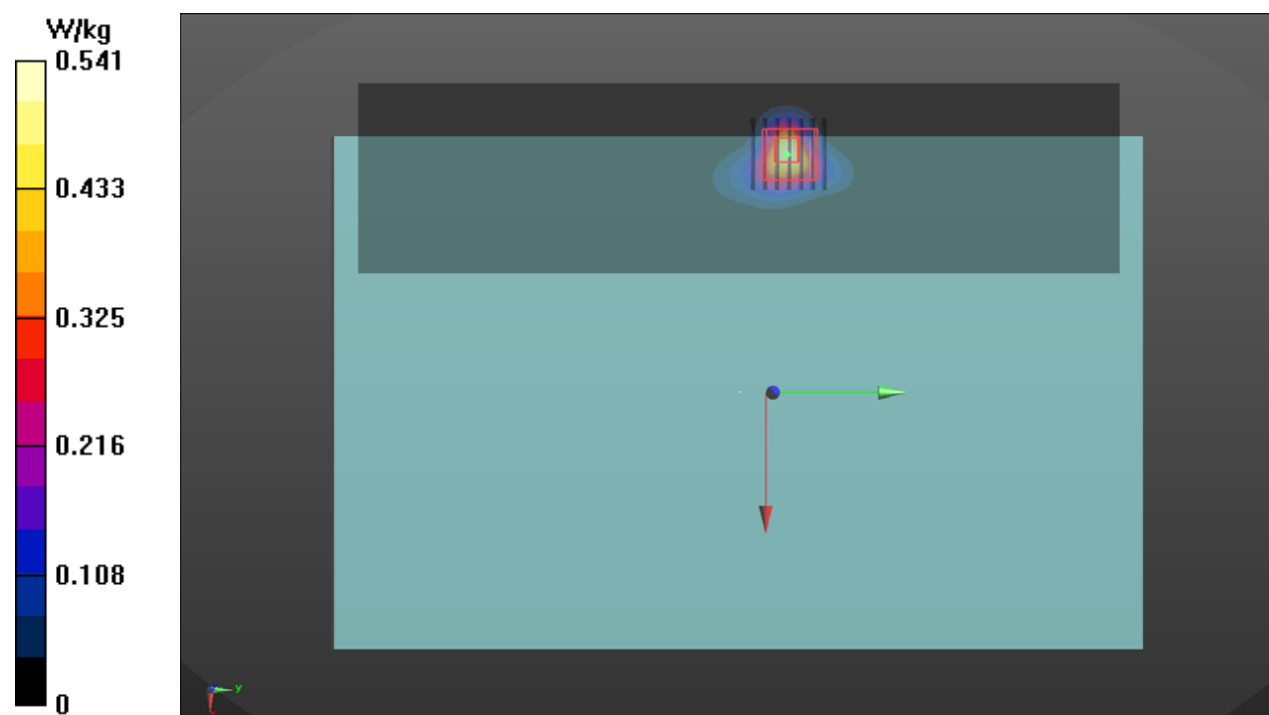
Peak SAR (extrapolated) = 1.96 W/kg

SAR(1 g) = 0.712 W/kg; SAR(10 g) = 0.254 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 5.6 mm

Ratio of SAR at M2 to SAR at M1 = 40%

Maximum value of SAR (measured) = 1.46 W/kg



**P26 5G NR-n66_DFT-S-15KHz_QPSK20M_Rear
Face_0mm_Ch354000_50RB_OS0_Sample1_Ant0_P-sensor_w_Battery6Cell****DUT: 200417C02**

Communication System: UID 0, CW; Frequency: 1770 MHz; Duty Cycle: 1:3.82

Medium: H16T20N1_0525 Medium parameters used: $f = 1770$ MHz; $\sigma = 1.344$ S/m; $\epsilon_r = 39.267$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(8.73, 8.73, 8.73) @ 1770 MHz; Calibrated: 2020/01/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2020/01/24
- Phantom: ELI Phantom_1204; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x241x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.823 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 18.40 V/m; Power Drift = -0.06 dB

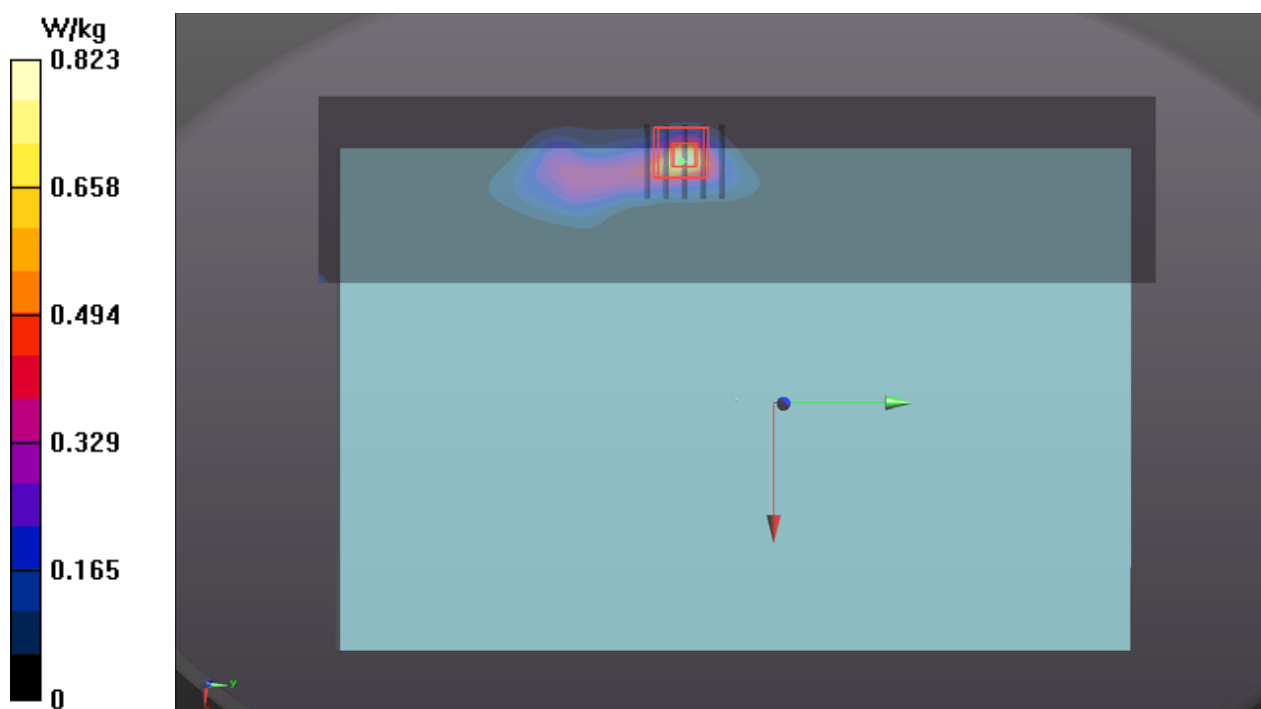
Peak SAR (extrapolated) = 1.10 W/kg

SAR(1 g) = 0.463 W/kg; SAR(10 g) = 0.183 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 10.4 mm

Ratio of SAR at M2 to SAR at M1 = 39.5%

Maximum value of SAR (measured) = 0.851 W/kg



P27 WLAN2.4G_802.11b_Rear Face_0mm_Ch6_Sample1_Ant1_Battery6cell**DUT: 200417C02**

Communication System: UID 10415 - AAA, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: H19T27N1_0512 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.863$ S/m; $\epsilon_r = 39.179$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.8 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7472; ConvF(7.7, 7.7, 7.7) @ 2437 MHz; Calibrated: 2019/08/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2019/08/27
- Phantom: ELI Phantom_2105; Type: QD OVA 004 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x251x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.57 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.89 V/m; Power Drift = -0.10 dB

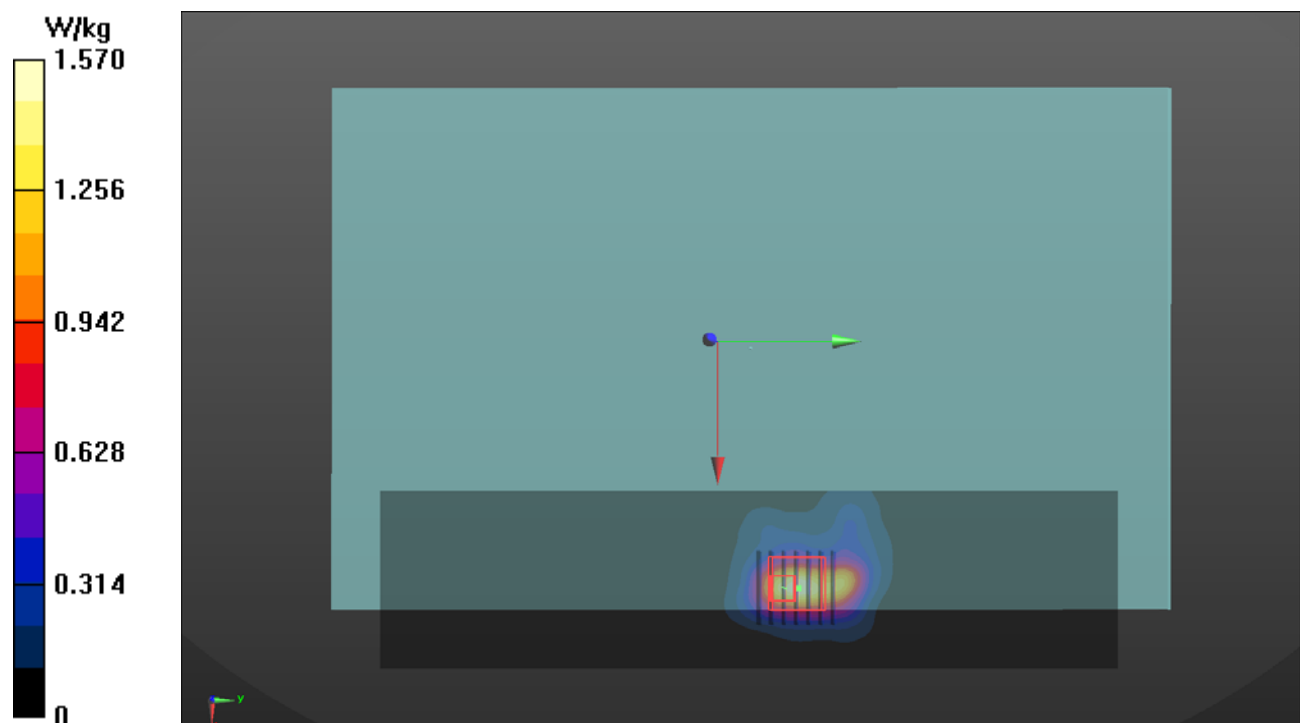
Peak SAR (extrapolated) = 2.75 W/kg

SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.429 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 6.7 mm

Ratio of SAR at M2 to SAR at M1 = 40.1%

Maximum value of SAR (measured) = 2.03 W/kg



P28 WLAN5.2G_802.11ac VHT80_Top Side_0mm_Ch42_Sample2_Ant0 +1_Battery6cell

DUT: 200417C02

Communication System: UID 10544 - AAC, IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle); Frequency: 5210 MHz; Duty Cycle: 1:1.02

Medium: H34T60N1_0513 Medium parameters used (interpolated): $f = 5210 \text{ MHz}$; $\sigma = 4.478 \text{ S/m}$;

$\epsilon_r = 37.049$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : $23.6 \text{ }^\circ\text{C}$; Liquid Temperature : $23.3 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(5.36, 5.36, 5.36) @ 5210 MHz; Calibrated: 2019/06/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2019/06/07
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x301x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 2.44 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 25.50 V/m ; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 4.10 W/kg

SAR(1 g) = 1.16 W/kg ; SAR(10 g) = 0.356 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 6.4 mm

Ratio of SAR at M2 to SAR at M1 = 69.6%

Maximum value of SAR (measured) = 2.70 W/kg

Zoom Scan (7x7x7)/Cube 1: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 25.50 V/m ; Power Drift = 0.09 dB

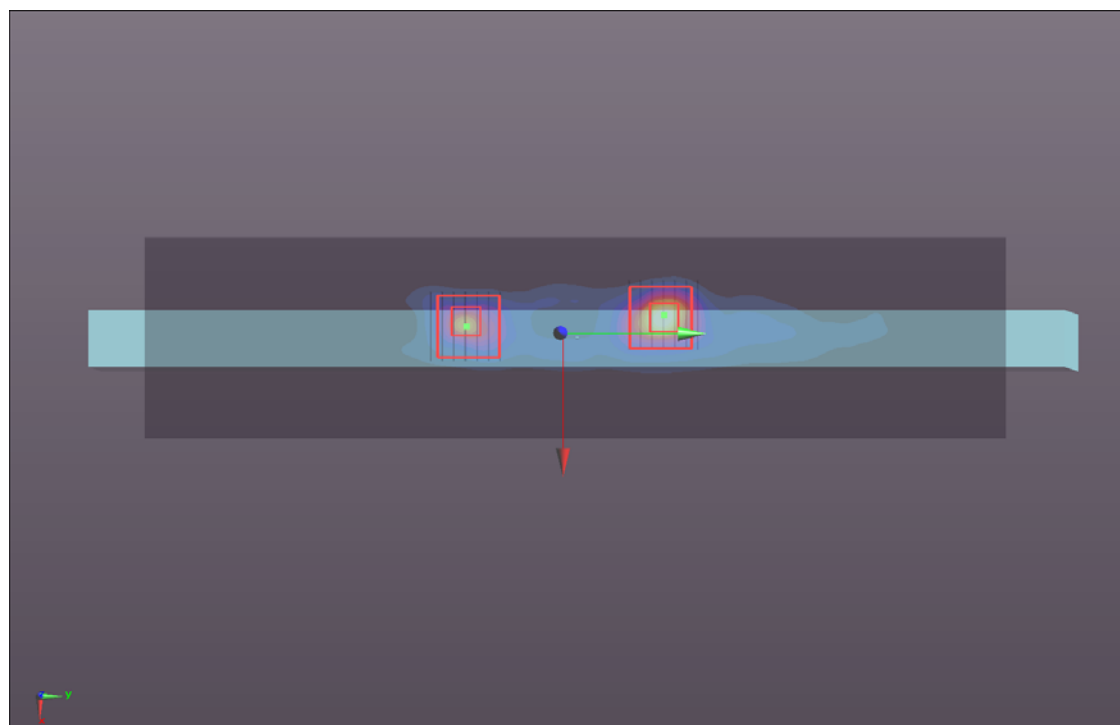
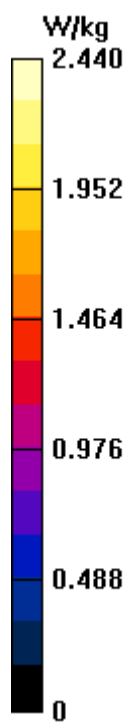
Peak SAR (extrapolated) = 2.80 W/kg

SAR(1 g) = 0.749 W/kg ; SAR(10 g) = 0.238 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 5.6 mm

Ratio of SAR at M2 to SAR at M1 = 67.1%

Maximum value of SAR (measured) = 1.69 W/kg



P29 WLAN5.6G_802.11ac VHT160_Top Side_0mm_Ch114_Sample1_Ant 1_Battery6cell**DUT: 200417C02**

Communication System: UID 10554 - AAC, IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle); Frequency: 5570 MHz; Duty Cycle: 1:1.01

Medium: H34T60N3_0512 Medium parameters used: $f = 5570$ MHz; $\sigma = 5.134$ S/m; $\epsilon_r = 34.782$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.8 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7472; ConvF(5.1, 5.1, 5.1) @ 5570 MHz; Calibrated: 2019/08/30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2019/08/27
- Phantom: ELI Phantom_2105; Type: QD OVA 004 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x301x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 3.47 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 20.95 V/m; Power Drift = -0.02 dB

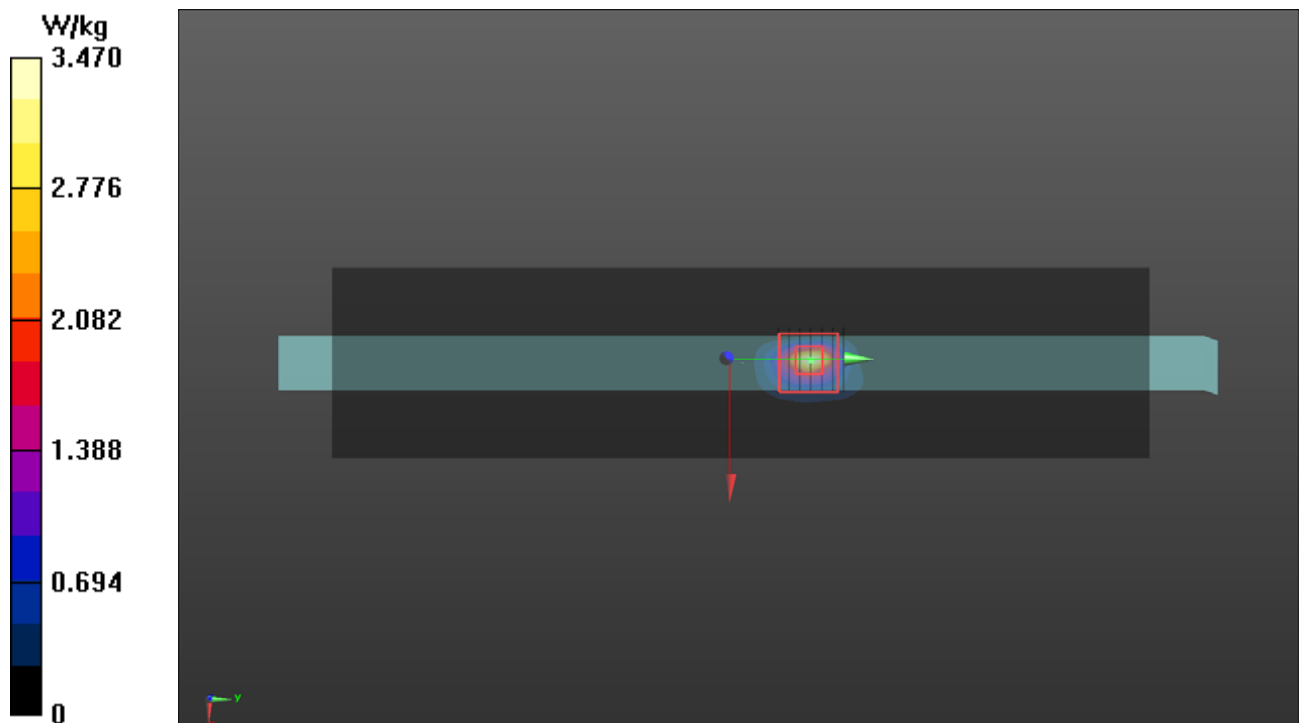
Peak SAR (extrapolated) = 4.22 W/kg

SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.301 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 5.4 mm

Ratio of SAR at M2 to SAR at M1 = 65.6%

Maximum value of SAR (measured) = 2.61 W/kg



P30 WLAN5.8G_802.11ac VHT80_Top Side_0mm_Ch155_Sample2_ Ant 1_Battery6cell**DUT: 200417C02**

Communication System: UID 10544 - AAB, IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle); Frequency: 5775 MHz; Duty Cycle: 1:1.02

Medium: H34T60N1_0513 Medium parameters used: $f = 5775$ MHz; $\sigma = 5.032$ S/m; $\epsilon_r = 36.307$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(4.99, 4.99, 4.99) @ 5775 MHz; Calibrated: 2019/06/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2019/06/07
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x301x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 2.78 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 24.52 V/m; Power Drift = 0.02 dB

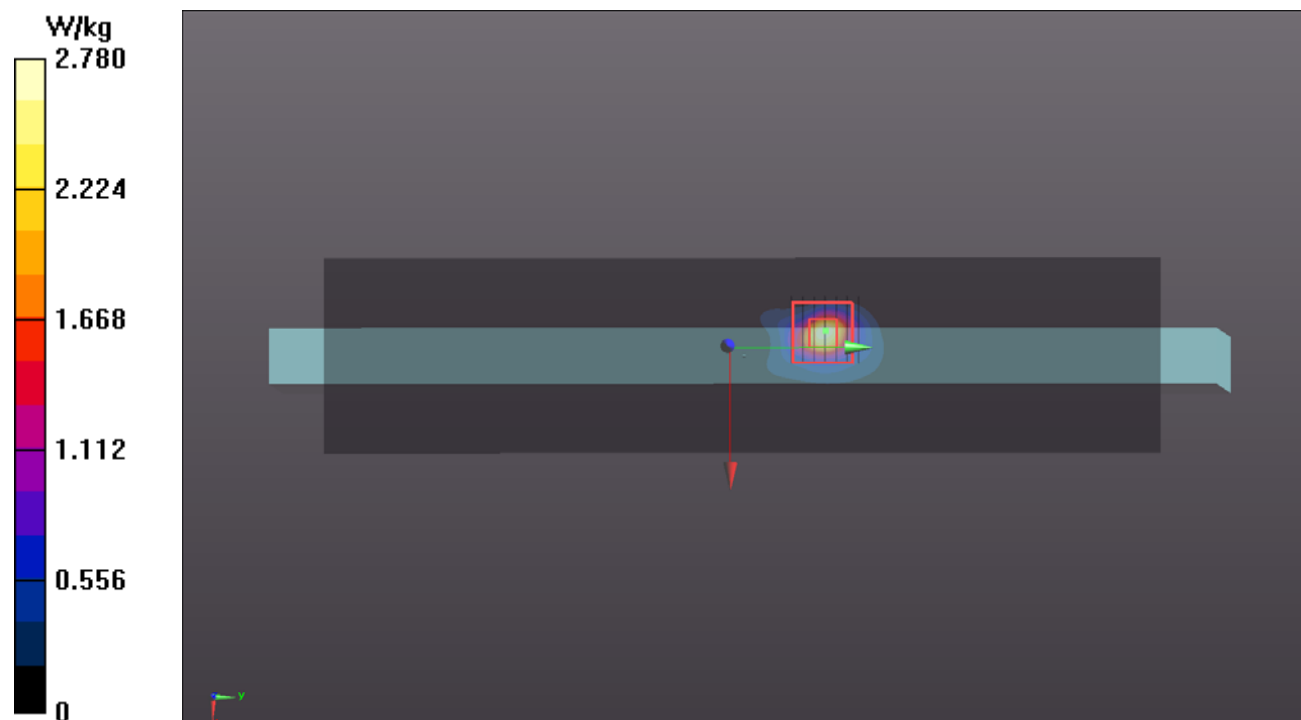
Peak SAR (extrapolated) = 4.96 W/kg

SAR(1 g) = 1.17 W/kg; SAR(10 g) = 0.324 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 5.7 mm

Ratio of SAR at M2 to SAR at M1 = 63.6%

Maximum value of SAR (measured) = 2.95 W/kg



P31 BT_BDR_Rear Face_0mm_Ch0_Sample1_Ant1_Battery6cell**DUT: 200417C02**

Communication System: UID 10032 - CAA, IEEE 802.15.1 Bluetooth (GFSK, DH5); Frequency: 2402 MHz; Duty Cycle: 1:1.3

Medium: H19T27N3_0515 Medium parameters used (interpolated): $f = 2402$ MHz; $\sigma = 1.831$ S/m;

$\epsilon_r = 39.369$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.8 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(7.56, 7.56, 7.56) @ 2402 MHz; Calibrated: 2019/06/27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 2019/06/20
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (71x251x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.209 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.17 V/m; Power Drift = -0.05 dB

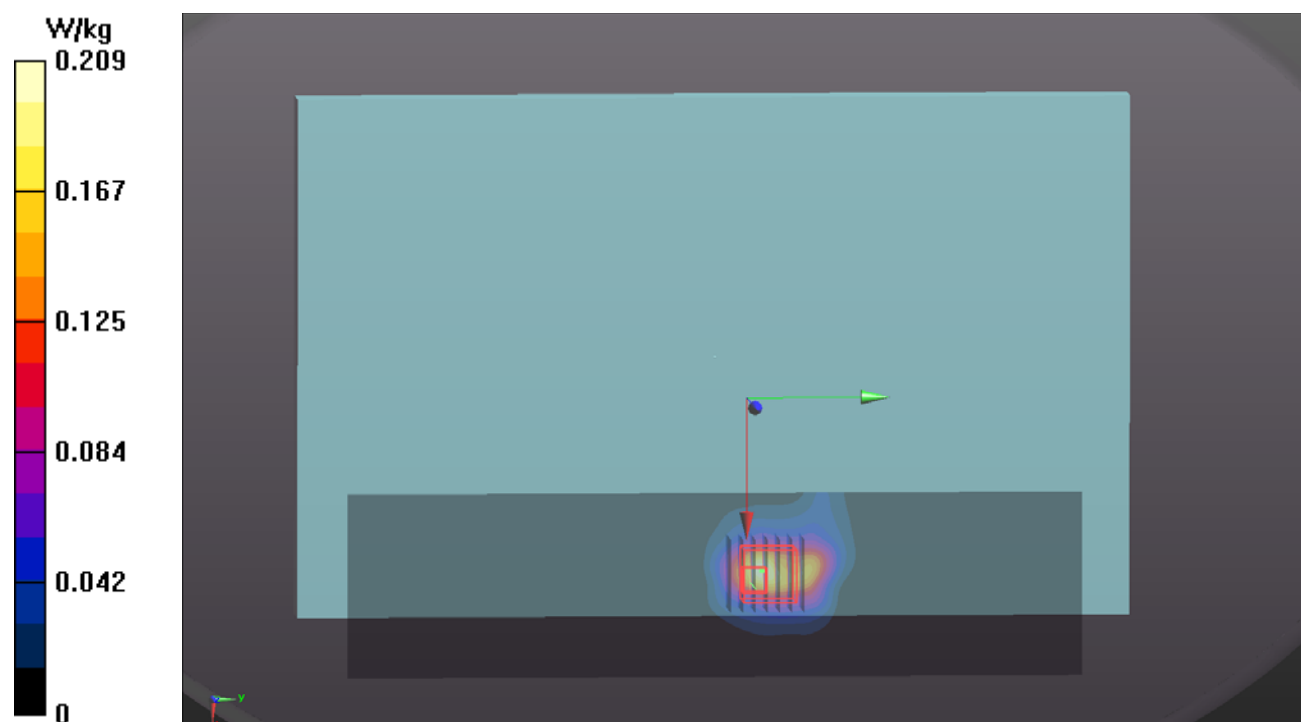
Peak SAR (extrapolated) = 0.393 W/kg

SAR(1 g) = 0.136 W/kg; SAR(10 g) = 0.058 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 6.7 mm

Ratio of SAR at M2 to SAR at M1 = 36.7%

Maximum value of SAR (measured) = 0.282 W/kg



P32 WCDMA**II_RMC12.2K_Bottom_0mm_Ch9262_Sample1_Ant0_P-sensor_w_Battery6cell****DUT: 200205C02**

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 1852.4

MHz; Duty Cycle: 1:1.95

Medium: H16T20N3_0511 Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.417$ S/m;

$\epsilon_r = 38.684$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(8.13, 8.13, 8.13) @ 1852.4 MHz; Calibrated: 2019/06/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2019/06/07
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x221x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 1.22 W/kg

Zoom Scan (7x7x8)/Cube 0: Measurement grid: $dx=6$ mm, $dy=6$ mm, $dz=1.4$ mm

Reference Value = 25.93 V/m; Power Drift = -0.07 dB

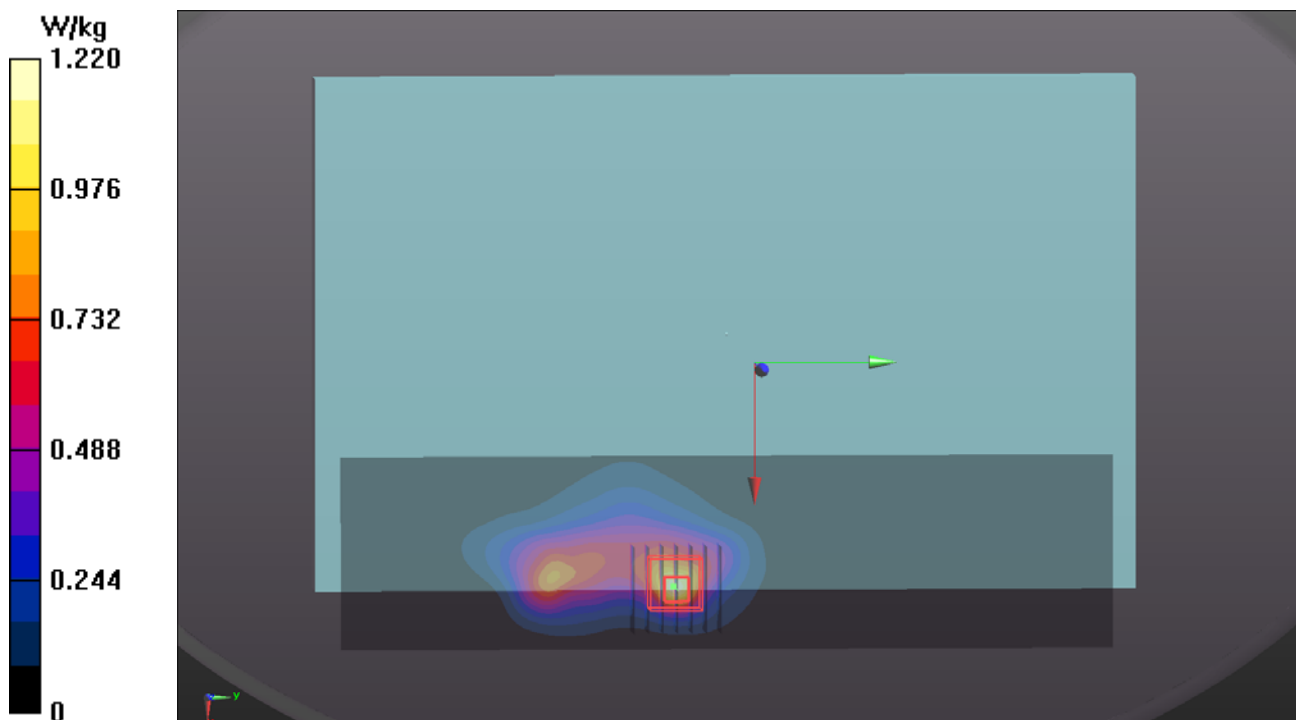
Peak SAR (extrapolated) = 1.76 W/kg

SAR(1 g) = 0.778 W/kg; SAR(10 g) = 0.381 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7.6 mm

Ratio of SAR at M2 to SAR at M1 = 62.5%

Maximum value of SAR (measured) = 1.38 W/kg



P33 WCDMA**IV_RMC12.2K_Bottom_0mm_Ch1513_Sample1_Ant0_P-sensor_w_Battery 6cell****DUT: 200417C02**

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 1752.6 MHz; Duty Cycle: 1:1.95

Medium: H16T20N3_0511 Medium parameters used: $f = 1753$ MHz; $\sigma = 1.325$ S/m; $\epsilon_r = 39.014$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.6 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7537; ConvF(8.44, 8.44, 8.44) @ 1752.6 MHz; Calibrated: 2019/06/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1585; Calibrated: 2019/06/07
- Phantom: ELI Phantom_1043; Type: QDOVA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (61x221x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.32 W/kg

Zoom Scan (7x7x8)/Cube 0: Measurement grid: dx=6mm, dy=6mm, dz=1.4mm

Reference Value = 28.28 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.85 W/kg

SAR(1 g) = 0.888 W/kg; SAR(10 g) = 0.426 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7.2 mm

Ratio of SAR at M2 to SAR at M1 = 63.6%

Maximum value of SAR (measured) = 1.48 W/kg

